

EXHIBIT A

Jury Demand and
Complaint filed in the
Seventh Judicial District
Court, Case No.
CV-0903320

EXHIBIT A

FILED

2020 SEP -3 PM 2: 22

LISA L. LLOYD
LINCOLN COUNTY CLERK

Case No. CV-0903320

Dept. No

**IN THE SEVENTH JUDICIAL DISTRICT COURT OF THE STATE OF NEVADA
IN AND FOR THE COUNTY OF LINCOLN**

LINCOLN COUNTY WATER DISTRICT, a
political subdivision of the State of Nevada,
and VIDLER WATER COMPANY, INC., a
Nevada corporation,

Plaintiffs,

vs.

STATE OF NEVADA, DEPARTMENT OF
CONSERVATION AND NATURAL
RESOURCES, DIVISION OF WATER
RESOURCES, AND NEVADA STATE
ENGINEER,

Defendant.

JURY DEMAND

JURY DEMAND

Plaintiffs LINCOLN COUNTY WATER DISTRICT ("LINCOLN"), a political subdivision of the State of Nevada, by and through its attorney, DYLAN V. FREHNER, ESQ., LINCOLN COUNTY DISTRICT ATTORNEY, and VIDLER WATER COMPANY, INC., ("VIDLER"), a Nevada corporation, by and through its attorney, ALLISON, MACKENZIE, LTD., hereby demand a trial by jury pursuant to Nev.R.Civ.P. 38 on any and all triable issues in Case No. CV-0903320. The fees required by Rule 38 shall be deposited with the Court at the time of filing this demand.

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AFFIRMATION

The undersigned does hereby affirm that the preceding document **DOES NOT** contain the social security number of any person.

DATED this 3 day of Sept, 2020.

By: 

KAREN A. PETERSON, ESQ.
Nevada State Bar No. 366
ALLISON MacKENZIE, LTD.
402 North Division Street
Carson City, Nevada 89703
Telephone: (775) 962-8073
Email: kperteson@allisonmackenzie.com
Attorney for Plaintiff VIDLER WATER
COMPANY

-and-

By: 

DYLAN V. FEHNER, ESQ
Nevada State Bar No. 9020
LINCOLN COUNTY DISTRICT ATTORNEY
181 North Main Street, Suite 205
P.O. Box 60
Pioche, Nevada 89043
Telephone: (775) 962-8073
Email: dfehner@lincolncountynv.gov

Attorney for Plaintiff, LINCOLN COUNTY
WATER DISTRICT

FILED

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LISA C. LLOYD
LINCOLN COUNTY CLERK

Case No. CV 0903320

Dept. No

**IN THE SEVENTH JUDICIAL DISTRICT COURT OF THE STATE OF NEVADA
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STATE OF NEVADA, DEPARTMENT OF
CONSERVATION AND NATURAL
RESOURCES, DIVISION OF WATER
RESOURCES, AND NEVADA STATE
ENGINEER,

Defendant.

COMPLAINT

(Exempt from Arbitration: Inverse
Action for Damages in Excess of \$50,000)

COMPLAINT

Plaintiffs LINCOLN COUNTY WATER DISTRICT ("LINCOLN"), a political subdivision of the State of Nevada, by and through its attorney, DYLAN V. FREHNER, ESQ., LINCOLN COUNTY DISTRICT ATTORNEY, and VIDLER WATER COMPANY, INC., ("VIDLER"), a Nevada corporation, by and through its attorney, ALLISON, MACKENZIE, LTD., allege as follows:

INTRODUCTION

1. More than 10 years ago, the Nevada State Engineer granted LINCOLN and VIDLER's applications to appropriate groundwater in the Kane Springs Hydrologic Basin (206) ("Kane Springs") and issued permits appropriating senior priority water rights in Kane Springs to Plaintiffs LINCOLN and VIDLER. Plaintiffs spent millions of dollars proving and subsequently developing those senior priority water rights, only to have the State Engineer take those vested property rights without paying just compensation. The government did this by unlawfully including Kane Springs in the Lower White

1 River Flow System ("LWRFS") super-basins, by limiting the pumping in that administratively created
2 super-basin to 8,000 afy of water, by prohibiting Plaintiffs from pumping their senior priority water
3 rights, and effectively transferring Plaintiffs' senior priority water rights to third-parties thereby
4 rendering their vested property rights valueless.

5 2. LINCOLN and VIDLER therefore bring this case for inverse condemnation against the
6 State of Nevada because the State Engineer has taken LINCOLN and VIDLER's vested water rights in
7 Kane Springs without paying just compensation as required under the Fifth and Fourteenth
8 Amendments of the United States Constitution and under Article 1, Section 8(3) of the Nevada
9 Constitution.

10 3. LINCOLN and VIDLER alternatively bring this action to enjoin the State Engineer from
11 directly or indirectly transferring LINCOLN and VIDLER's senior vested water rights to other water
12 users in violation of N.R.S. § 37.010 (2).

13 4. Finally, LINCOLN and VIDLER bring this action for the State Engineer's breach of a 2010
14 settlement agreement. In addition to the senior vested water rights already granted under the permits
15 appropriating 1,000 afy of water, LINCOLN and VIDLER had pending other applications to
16 appropriate additional groundwater within Kane Springs. After the State Engineer erroneously denied
17 those applications, LINCOLN and VIDLER appealed that denial and later entered into a settlement
18 agreement with the State Engineer that reinstated those applications and established a procedure that
19 the State Engineer agreed would govern the methodology used to determine whether additional water
20 could be appropriated in Kane Springs. When the State Engineer in 2020 added Kane Springs to the
21 LWRFS and limited the amount of water that could be pumped within the LWRFS super-basin, the
22 State Engineer denied LINCOLN and VIDLER's pending applications within Kane Springs because
23 no further water can be appropriated in Kane Springs. But in making that decision, the State Engineer
24 failed to follow the procedures and methodologies previously agreed to under the settlement agreement.
25 The State Engineer breached that agreement and caused LINCOLN and VIDLER damages.

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1 **PARTIES, JURISDICTION AND VENUE**

2 5. LINCOLN is a political subdivision of the State of Nevada, created for the purpose of
3 providing adequate and efficient water service within Lincoln County, Nevada.

4 6. VIDLER is a Nevada corporation authorized to conduct business in the State of Nevada.

5 7. LINCOLN and VIDLER own groundwater permits to appropriate water within Kane
6 Springs for municipal-use purposes, with a place of use in Coyote Spring Valley Hydrographic Basin
7 (Basin 210) ("Coyote Springs"), with a priority date of February 14, 2005. LINCOLN and VIDLER
8 also jointly own groundwater right applications, filed April 10, 2006, to appropriate additional
9 groundwater within Kane Springs. The permits and pending applications are more specifically
10 described below. The Kane Springs Hydrographic Basin and the points of diversion in LINCOLN and
11 VIDLER's permits and applications are located entirely in Lincoln County, Nevada.

12 8. Defendant State of Nevada, acting through the Nevada State Engineer, Division of Water
13 Resources, Department of Conservation and Natural Resources ("State Engineer") is empowered to act
14 pursuant to the provisions of Chapters 533 and 534 of the Nevada Revised Statutes. The Nevada
15 Legislature provided that, subject to existing rights, all underground waters within the boundaries of
16 the State of Nevada are subject to appropriation for beneficial use under the laws of Nevada, and it is
17 the charge of the State Engineer to put water to beneficial use for the economic benefit of the State of
18 Nevada. The Office of the State Engineer is established by statute; it has no inherent power. Its powers
19 and jurisdiction are limited as provided by statute.

20 9. This Court has jurisdiction over the parties to this action pursuant to N.R.S. § 14.065.

21 10. This Court has jurisdiction over this matter pursuant to Nev. Const. Art. VI, § 6, as this
22 Court has original jurisdiction in all cases not assigned to the justice courts.

23 11. Venue is proper in Lincoln County under N.R.S. § 13.020.

24 **GENERAL ALLEGATIONS**

25 **A. Appropriation of groundwater.**

26 12. All water in Nevada is subject to appropriation, including groundwater. Since 1939, in
27 order to appropriate groundwater, an application to appropriate groundwater must be filed with the
28 State Engineer, and the State Engineer must issue a permit to appropriate groundwater.

1 13. Nevada is divided into 256 hydrographic basins, and each basin is considered a separate
2 source of water from which an appropriation may be sought. Under N.R.S. § 534.050, an application
3 to appropriate groundwater is required in any hydrographic basin from which the appropriation is
4 sought. Depending on whether the State Engineer has “designated” the basin, the application to
5 appropriate must be filed either before the well is drilled in the basin, or after the well is drilled but
6 before the appropriation may begin from the basin. Similarly, N.R.S. § 534.100 provides that the State
7 Engineer’s ability to adjudicate groundwater rights is limited to a single hydrographic basin or a portion
8 of the basin.

9 14. The amount of groundwater that can be appropriated from a basin is limited to that basin’s
10 perennial yield because when the perennial yield of a basin is consistently exceeded, the State Engineer
11 is to determine if the basin should be designated a critical management area and to conduct studies to
12 determine if the annual recharge to the basin is sufficient to satisfy all permittees entitled to withdraw
13 groundwater from that basin. *See* N.R.S. § 534.110. The perennial yield is the maximum amount of
14 groundwater that can be salvaged each year over the long term without depleting the groundwater
15 reservoir. The perennial yield cannot be more than the natural recharge to a groundwater basin, and in
16 some cases is less. Natural recharge is the amount of precipitation that would either reach the
17 groundwater table or otherwise be subject to evapotranspiration within the basin.

18 15. Water rights are administered on the basis of seniority or priority—first in time, first in
19 right for that basin. If a basin’s average perennial yield is insufficient to satisfy the needs of all
20 appropriators in that basin, the State Engineer may restrict withdrawals of groundwater to conform to
21 the priority of rights within that basin, may designate the basin as a critical management area, and can
22 restrict other wells within the basin. N.R.S. § 534.110.

23 16. The appropriation of groundwater on a basin-by-basin basis has been the law in Nevada
24 for over eight decades, and appropriators throughout the state have invested vast amounts of time,
25 money, and resources in reliance upon the priority system established by the Nevada Legislature.
26 Economic development, jobs, and the security of the state’s citizens depend upon this system of priority
27 and the property rights granted to groundwater appropriators. The Legislature recognized the valuable
28 property rights that attach to an appropriated water right and has declared that water rights are subject

1 to condemnation under the power of eminent domain. The taking of a water right under the power of
2 eminent domain requires that just compensation be paid for that right under the Fifth and Fourteenth
3 Amendments of the United States Constitution, and under Article 1, Section 8(3) of the Nevada
4 Constitution.

5 **B. LINCOLN and VIDLER entered into a public-private partnership to develop water**
6 **resources for Lincoln County that would support the County's economic**
7 **development.**

8 17. In September of 1998, VIDLER and Lincoln County entered into a Water Resource
9 Planning Memorandum of Understanding ("MOU") providing for water-resource planning within
10 Lincoln County. The purpose of the MOU was to develop the water resources required to support
11 development in order to stimulate economic growth and create jobs within Lincoln County.

12 18. Lincoln County assigned its rights in the MOU, water permits, applications, and other
13 agreements to LINCOLN.

14 19. Pursuant to the MOU and other agreements, LINCOLN and VIDLER would each own
15 one-half of the water rights that could be appropriated in various groundwater basins located in Lincoln
16 County.

17 20. In April of 2005, LINCOLN and VIDLER entered into an agreement for the development
18 of water resources for the Coyote Springs Project ("Project"). The purpose of that agreement was to
19 develop water resources and obtain necessary rights-of-way to serve the Project. The Project consists
20 of 25,000 acres of planned residential, commercial and recreational development in Lincoln County.
21 The Project straddles Clark County.

22 **C. LINCOLN and VIDLER have the most senior vested water rights in Kane Springs.**

23 **(a) On February 14, 2005, LINCOLN and VIDLER filed four applications to**
24 **appropriate groundwater within Kane Springs.**

25 21. On February 14, 2005, LINCOLN and VIDLER filed Applications 72218, 72219, 72220,
26 and 72221 to appropriate groundwater in Kane Springs (collectively, the "2005 Applications").

27 22. The 2005 Applications were protested by White Pine County, the United States Department
28 of the Interior, National Park Service ("NPS"), the United States Department of Interior, Fish and

1 Wildlife Service ("FWS"), and Wayne Lister, Ruby Lister, and Bevan Lister (collectively, the
2 "Listers").

3 23. White Pine County withdrew its protests prior to an administrative hearing held by the
4 State Engineer.

5 24. The Listers protested LINCOLN and VIDLER's 2005 Applications, arguing that
6 LINCOLN had not adopted a written plan for the use of the water, that moving water from one Basin
7 to another Basin was detrimental to the originating Basin, and that LINCOLN, in "teaming up" with
8 VIDLER, had become a speculator with the sole objective to make a profit.

9 25. The NPS protested the application, among other reasons, on the following bases:

- 10 • That no water was available for appropriation within Kane Springs;
11 • That the requested appropriation, in combination with other appropriations and
12 withdrawals within Coyote Springs, would reduce the discharge to the Muddy River and
13 impair senior water rights to the Muddy River; and
14 • That the requested appropriation, in combination with other appropriations and
15 withdrawals within the White River groundwater flow system, would reduce the discharge
16 of Lake Mead National Recreation Area springs and impair senior water rights in the Lake
17 Mead National Recreation Area.

18 26. The FWS protested the application, among other reasons, because the Muddy River is the
19 home to the Moapa dace, a critically endangered species of fish, and the FWS sought to ensure that the
20 endangered fish be protected against harm or take that could result from allowing appropriation within
21 Kane Springs.

22 27. On February 6, 2006, NPS and FWS requested the State Engineer to add Kane Springs into
23 a proceeding regarding the LWRFS carbonate-rock aquifer Basins ("LWRFS Basins"), as defined in
24 Order No. 1169 dated March 8, 2002. Order No. 1169 and the subsequent Orders and history of the
25 LWRFS Basins will be discussed in more detail below. Kane Springs had not previously been included
26 in the LWRFS Basins and had not been made part of the Order No. 1169 study. A true and correct
27 copy of Order 1169 is attached as Exhibit "1" and incorporated by this reference as if fully set forth
28 herein.

1 28. On August 1, 2006, FWS, LINCOLN, and VIDLER entered into an Amended Stipulation
2 for Withdrawal of Protests of the 2005 Applications ("Amended Stipulation for Withdrawal of
3 Protests"). The Amended Stipulation for Withdrawal of Protests contains, among other things, triggers
4 to reduce LINCOLN and VIDLER's groundwater pumping if the flow to identified springs is reduced
5 to certain levels to protect the critical habitat of the endangered Moapa dace. Plaintiffs and FWS have
6 performed and continue to perform under the terms of the Amended Stipulation for Withdrawal of
7 Protests. A true and accurate copy of the Amended Stipulation for Withdrawal of Protests is attached
8 hereto as Exhibit "2".

9 29. Pursuant to the Amended Stipulation for Withdrawal of Protests, the FWS withdrew all of
10 its protests, including its request to have Kane Springs added to Order 1169 and to become a part of the
11 LWRFS Basins.

12 30. However, the NPS continued its protests, including its request to have Kane Springs
13 included in Order 1169 and be included as one of the LWRFS Basins.

14 **(b) The State Engineer granted LINCOLN and VIDLER 1,000 afy on the 2005**
15 **Applications.**

16 31. From April 4 through 6, 2006, the State Engineer's Office held a hearing on the 2005
17 Applications.

18 32. On February 2, 2007, the State Engineer issued Ruling 5712, partially approving the 2005
19 Applications and appropriating to LINCOLN and VIDLER 1,000 afy of water rights in Kane Springs.
20 A true and correct copy of Ruling 5712 is attached as Exhibit "3" and incorporated by this reference as
21 if fully set herein.

22 33. The State Engineer found that no water had previously been appropriated in Kane Springs,
23 and that no permitted or certificated groundwater rights existed in Kane Springs as of the time the 2005
24 Applications were partially granted. The State Engineer found that the evidence supported a perennial
25 yield within Kane Springs of at least 1,000 afy and granted the 2005 Applications for that amount of
26 water.

27 34. The State Engineer rejected the NPS's requests to include Kane Springs in Order 1169 as
28 part of the LWRFS Basins because the State Engineer found there was not substantial evidence that the

1 appropriation of water being granted within Kane Springs would have any measurable impact on flows
2 of the Muddy River Springs, Rogers Springs, or Blue Point Springs. Thus, "the State Engineer denies
3 the request to hold these applications in abeyance and include Kane Springs within the provisions of
4 Order No. 1169." Exh. 3 at p. 21.

5 35. The State Engineer further found in Ruling 5712 that, although the evidence indicated some
6 hydrologic connection between Kane Springs and Coyote Springs, the "marked difference in head
7 [elevations] supports the probability of a low-permeability structure or change in lithology between
8 Kane Springs Valley and the southern part of Coyote Spring Valley." Exh. 3 at p. 21.

9 36. On May 31, 2007, the State Engineer issued Permit 72218, Permit 72219, Permit 72220,
10 and Permit 72221 to appropriate a total of 1,000 afy of water in Kane Springs, with a priority date of
11 February 14, 2005. True and correct copies of Permits 72218, 72219, 72220, and 72221 are attached
12 hereto as Exhibits "4", "5", "6", and "7" respectively and incorporated by this reference as if fully set
13 herein.

14 37. Under their terms, the total combined duty of water under Permits 72218, 72219, and 72221
15 cannot exceed 500 afy. The total combined duty of water under Permits 72218, 72219, 72220, and
16 72221 shall not exceed 1,000 afy.

17 38. Seven years later, on August 27, 2014, the State Engineer issued Permit 82727, changing
18 the point of diversion under Permit 72218, and Permit 82728, changing the point of diversion under
19 Permit 72219. True and correct copies of Permits 82727 and 82728 are attached hereto as Exhibits "8"
20 and "9" respectively and incorporated by this reference as if fully set herein.

21 39. The rights the State Engineer granted to LINCOLN and VIDLER in Ruling 5712 and
22 Permits 72218, 72219, 72220, 72221, 82727, and 82728 (collectively, the "Permitted Rights") were
23 and are vested property rights still held by LINCOLN and VIDLER.

24 40. The appropriations granted to LINCOLN and VIDLER under the Permitted Rights are the
25 most senior rights in Kane Springs and LINCOLN and VIDLER have priority to groundwater in Kane
26 Springs.

1 **D. LINCOLN and VIDLER filed additional applications for appropriations within**
2 **Kane Springs.**

3 **(a) LINCOLN and VIDLER filed four additional applications to appropriate**
4 **water within Kane Springs.**

5 41. On April 10, 2006, four days after the State Engineer's hearing ended on the pending
6 Kane Springs 2005 Applications, LINCOLN and VIDLER filed Applications 74147, 74148, 74149,
7 and 74150 (collectively, the "2006 Applications") to appropriate additional water within Kane
8 Springs. True and correct copies of Applications 74147, 74148, 74149, and 74150 are attached as
9 Exhibits "10", "11", "12", and "13" respectively and are incorporated by this reference as if fully set
10 forth herein.

11 42. The 2006 Applications were protested by the United States Department of Interior,
12 Bureau of Indian Affairs, the Moapa Band of Paiute Indians, NPS, Mr. Richard Rankin, and the
13 Moapa Valley Water District.

14 43. After the State Engineer issued Ruling 5712, LINCOLN and VIDLER met with the State
15 Engineer on March 15, 2007 regarding their 2006 Applications. LINCOLN and VIDLER requested
16 that additional data collection, testing, and study be performed within Kane Springs to support their
17 pending applications. The State Engineer informed LINCOLN and VIDLER that he would consider
18 granting LINCOLN and VIDLER additional unappropriated water rights within Kane Springs pursuant
19 to their pending 2006 Applications if LINCOLN and VIDLER collected the additional data to support
20 the pending applications.

21 44. After their meeting with the State Engineer, LINCOLN and VIDLER continued to collect
22 additional data and perform additional testing intended to support their pending Applications.

23 45. On April 29, 2009, the Acting State Engineer issued Ruling 5987, summarily denying the
24 2006 Applications. A true and correct copy of Ruling 5987 is attached as Exhibit "14" and incorporated
25 by this reference as if fully set forth herein. The State Engineer issued Ruling 5987 without prior notice,
26 without holding a hearing, without contacting LINCOLN and VIDLER, and without reviewing and
27 analyzing the additional data collections, testing, and study that LINCOLN and VIDLER were
28 continuing to perform and which the State Engineer stated he would review.

1 **(b) Pursuant to a settlement agreement with LINCOLN and VIDLER, the State**
2 **Engineer agreed to use a specific procedure and methodology to govern how to**
3 **determine the amount of additional appropriable groundwater within Kane**
4 **Springs.**

5 46. LINCOLN and VIDLER filed a Petition for Judicial Review with the Seventh Judicial
6 District Court on May 29, 2009, challenging the validity of the State Engineer's decision in Ruling
7 5987.

8 47. On April 21, 2010, LINCOLN and VIDLER and the State Engineer entered into a
9 "Settlement Agreement among the State Engineer, State of Nevada, Jason King, P.E., Acting Nevada
10 State Engineer, Lincoln County Water District and Vidler Water Company" ("Kane Springs Settlement
11 Agreement"), to resolve LINCOLN and VIDLER's Petition for Judicial Review challenging Ruling
12 5987. The Kane Springs Settlement Agreement required the State Engineer to reinstate the 2006
13 Applications with the same priority as their original application dates, and to then evaluate the 2006
14 Applications under the procedures set forth in the Kane Springs Settlement Agreement. A true and
15 correct copy of the Kane Springs Settlement Agreement is attached as Exhibit "15" and incorporated
16 by this reference as if fully set forth herein.

17 48. At the same time that LINCOLN and VIDLER and the State Engineer were negotiating the
18 Kane Springs Settlement Agreement, the same parties were also negotiating a settlement of another
19 matter regarding permits and applications within the Tule Desert Groundwater Basin (Basin 221) (the
20 "Tule Desert Settlement Agreement"). A true and correct copy of the Tule Desert Settlement
21 Agreement is attached as Exhibit "16" and incorporated by this reference as if fully set forth herein.
22 The Tule Desert Settlement resulted from an administrative appeal in the Seventh Judicial District
23 Court of the State of Nevada, in and for the County of Lincoln in Case No. CV-0518009, entitled
24 *Lincoln County Water District and Vidler Water Company v. State Engineer, State of Nevada*, and from
25 a federal lawsuit in the United States District Court for the District of Nevada in Case No. CV00392-
26 LRH-VPC, entitled *Lincoln County Water District and Vidler Water Company v. Tracy Taylor, P.E.*
27 *and Jason King, P.E.*. In the federal lawsuit, LINCOLN and VIDLER alleged the State Engineer and
28 Assistant State Engineer violated their procedural and substantive due process under the United States
 and Nevada Constitutions, based on the pervasive and systemic bias displayed against LINCOLN and

1 VIDLER at the State Engineer's office during its consideration of LINCOLN and VIDLER's
2 applications, including by:

- 3 • Interlining and adulterating the Tule Desert Ruling without notice to LINCOLN and
4 VIDLER to reduce the amount of water awarded and the amount that could later be
5 awarded under applications that were left open for further evaluation;
- 6 • Applying ad hoc rules to LINCOLN and VIDLER—but not other water appropriators and
7 applicants—in violation of the laws of appropriation of the State of Nevada;
- 8 • Rejecting the use of methodologies to prove additional water was available for
9 appropriation when submitted by LINCOLN and VIDLER, while accepting the same
10 methodologies when submitted by other applicants;
- 11 • Allowing a Deputy State Engineer to participate in decisions regarding LINCOLN and
12 VIDLER when that Deputy State Engineer had a clandestine business relationship with the
13 chief hydrologist of the primary protestant to LINCOLN and VIDLER's applications; and
- 14 • Allowing an employee of the State Engineer's office to participate in proceedings
15 involving LINCOLN and VIDLER while the employee had a bumper sticker on his vehicle
16 depicting a cartoon character urinating on "Vidler".

17 49. Section I of The Kane Springs Settlement Agreement, entitled "Studies Under N.R.S.
18 § 533.368 and the Use of Third Party Technical Consultants," specifically "incorporate[d] Section III
19 of the Tule Desert Agreement into" the Kane Springs Settlement Agreement and required "that the
20 terms of Section III of the Tule Desert Agreement shall apply to the State Engineer's review and
21 determination regarding the Kane Springs Applications." Section II of the Kane Springs Settlement
22 Agreement also required the State Engineer to "apply the provisions of Section III of the Tule Desert
23 Settlement Agreement in setting the criteria and in determining and in identifying necessary studies"
24 to determine more accurately the water available to appropriate under N.R.S. § 533.370.

25 50. Section III(B) of the Tule Desert Agreement states in pertinent part:

26 "The following steps will be followed for all current and future applications to appropriate
27 groundwater in hydrographic basins located wholly or partially within the boundaries of
28 Lincoln County, filed by [LINCOLN] and VIDLER, either individually or jointly. . ."

51. Section III(B) of the Tule Desert Agreement requires in part that the State Engineer must

1 consult with LINCOLN and VIDLER to determine written criteria for evaluating current and future
 2 applications, must use an independent Reviewing Consultant to "review and analyze the study or
 3 studies," and must "consult with the Reviewing Consultant prior to issuing a ruling on the applications."

4 52. Concurrently with the Kane Springs Settlement Agreement and the Tule Desert
 5 Agreement, LINCOLN, VIDLER and the State Engineer stipulated to the dismissal of the 2009 Petition
 6 for Judicial Review, the vacation of Ruling 5987, and the vacation of the denials and reinstatement of
 7 the 2006 Applications.

8 **E. LINCOLN and VIDLER engaged in significant work at significant cost to**
 9 **appropriate water under the Permitted Rights and to appropriate additional water**
 10 **under their pending 2006 Applications.**

11 53. LINCOLN and VIDLER have engaged in significant work since 2005 to develop water
 12 under the Permitted Rights and have expended significant capital toward that end in the approximate
 13 sum of \$4,237,000.

14 54. LINCOLN and VIDLER conducted, among other items, the following work to develop
 15 water under their Permitted Rights:

- 16 a. Permitting, drilling, constructing, and testing of production well KPW-1.
- 17 b. Permitting, drilling, constructing, and testing of monitor well KMW-1.
- 18 c. Engaging in and completing the National Environmental Policy Act requirements
 19 and processes.
- 20 d. Obtaining a Final Environmental Impact Statement for the proposed rights of way
 21 across Bureau of Land Management land.
- 22 e. Permitting and obtaining Right-of-Way Grant N-79742 from the Bureau of Land
 23 Management for the Kane Springs Valley Groundwater Development project dated January 15, 2008
 24 to prepare for building future infrastructure. A true and correct copy of the Right of Way Grant as
 25 corrected by Bureau of Land Management in January, 2009 is attached as Exhibit "17" and incorporated
 26 by this reference as if fully set forth herein.
- 27 f. Receiving a FWS Biological Opinion, File Nos. 84320-2008-F0007 and 84310-
 28 2008-I-0216, for the Kane Springs Valley Groundwater Development project, dated October 29, 2008,
 which was consistent with the Amended Stipulation for Withdrawal of Protests with the FWS and found

1 the mitigation measures agreed to protect the critical habitat of the Moapa dace. A true and correct
 2 copy of the Biological Opinion is attached as Exhibit "18" and incorporated by this reference as if fully
 3 set forth herein. LINCOLN and VIDLER each paid \$25,000 to the FWS to fund additional
 4 environmental mitigation measures to protect the Moapa dace as required by the Amended Stipulation
 5 for Withdrawal of Protests and the Biological Opinion.

6 g. Conducting hydrologic, geologic, and watershed studies supporting the 2005
 7 Applications and the Permitted Rights.

8 h. Conducting numerous geophysical studies throughout Kane Springs Valley and
 9 northern Coyote Spring Valley in Lincoln County.

10 55. LINCOLN and VIDLER have also engaged in significant work conducting additional data
 11 collection, testing, and studies, costing them approximately \$543,000, in reliance upon the Kane
 12 Springs Settlement Agreement that set forth the procedures and methodologies that the State Engineer
 13 must use to govern the amount of additional water that can be appropriated within Kane Springs under
 14 the 2006 Applications. This additional work includes:

15 a. Collecting and using data from the Remote Automated Weather Station in Kane
 16 Springs;

17 b. Installing and monitoring five Totalizing rain gages;

18 c. Installing and monitoring one tipping bucket rain gage with data logger;

19 d. Installing and monitoring nine TruTrack water height data recorders to measure
 20 streamflow runoff;

21 e. Measuring and creating channel depth profiles at each of the True-track data
 22 recorder locations;

23 f. Installing and monitoring two soil temperature sensors;

24 g. Collecting and measuring chloride in precipitation at three of the totalizing rain
 25 gage locations used to calculate how much precipitation becomes recharge;

26 h. Collecting and measuring chloride in runoff at three of the True-track data recorder
 27 locations;

28 i. Conducting a Soil Depth Survey throughout the basin;

- j. Conducting a Hydrographic Basin Inventory.
- k. Collecting and measuring chloride at five spring locations.
- l. Submitting collected data quarterly to the State Engineer.

F. LINCOLN and VIDLER contracted with Coyote Springs Investments LLC to sell some of their Permitted Rights for the Project.

56. On October 17, 2005, LINCOLN and VIDLER entered into a Purchase Agreement with Coyote Springs Investment LLC ("CSI"), in which CSI agreed to purchase all water that the State Engineer would appropriate to LINCOLN and VIDLER under the then-pending 2005 Applications, to be used for a development in the Project (the "CSI Purchase Agreement"). A true and correct copy of the CSI Purchase Agreement is attached as Exhibit "19" and incorporated by this reference as if fully set forth herein.

57. After the State Engineer granted LINCOLN and VIDLER 1,000 afy under the Permitted Rights, LINCOLN, VIDLER, and CSI amended the CSI Purchase Agreement on November 11, 2008 (the "1st Amendment") to, among other things, set the amount of water that was available for purchase and amend the purchase price to \$8,055.52 per acre-foot. A true and correct copy of the 1st Amendment is attached as Exhibit "20" and incorporated by this reference as if fully set forth herein.

58. On July 31, 2009, LINCOLN, VIDLER, and CSI amended the CSI Purchase Agreement again to provide, among other things, that LINCOLN would retain ownership of its portion (253.04 afy) of the 1,000 afy appropriated under the Permitted Rights, but would dedicate that 253.04 afy of appropriated water for use at the Project ("2nd Amendment"). Those parties amended the purchase price to reflect that CSI would purchase VIDLER's portion of the appropriated water under the Permitted Rights in the amount of 746.96 afy. CSI also agreed to pay a standby fee to LINCOLN until such time as the LINCOLN portion of the appropriated water could be dedicated for Project use. A true and correct copy of the 2nd Amendment is attached as Exhibit "21" and incorporated by this reference as if fully set forth herein.

59. In order to effectuate the 2nd Amendment, LINCOLN conveyed its interest in 746.96 afy of the Permitted Rights to VIDLER, and VIDLER conveyed its interest in 253.04 afy of the Permitted Rights to LINCOLN. A true and correct copy of the LINCOLN-to-VIDLER deed is attached as Exhibit

1 “22” and incorporated by this reference as if fully set forth herein. A true and correct copy of the
2 VIDLER-to-LINCOLN deed is attached as Exhibit “23” and incorporated by this reference as if fully
3 set forth herein.

4 60. On May 5, 2010, VIDLER conveyed to CSI 149.39 afy of VIDLER’s appropriated water
5 under the Permitted Rights, as contemplated in the CSI Purchase Agreement and the 1st and 2nd
6 Amendments (the “2010 Deed”). A true and correct copy of the 2010 Deed is attached as Exhibit “24”
7 and incorporated by this reference as if fully set forth herein.

8 61. On December 19, 2011, LINCOLN, VIDLER, and CSI amended the CSI Purchase
9 Agreement for a third time to provide, among other things, that CSI would agree to buy from VIDLER
10 97.57 afy, and that CSI would be granted an option to purchase the remaining 500 afy of Vidler’s water
11 appropriated under the Permitted Rights. (“3rd Amendment”). A true and correct copy of the 3rd
12 Amendment is attached as Exhibit “25” and incorporated by this reference as if fully set forth herein.

13 62. On August 22, 2012, VIDLER conveyed to CSI 97.57 afy of appropriated water under the
14 Permitted Rights pursuant to the CSI Purchase Agreement and the 1st, 2nd, and 3rd Amendments (the
15 “2012 Deed”). A true and correct copy of the 2012 Deed is attached as Exhibit “26” and incorporated
16 by this reference as if fully set forth herein.

17 63. On December 9, 2014, and again on May 10, 2016, LINCOLN, VIDLER, and CSI
18 amended the CSI Purchase Agreement for a fourth and fifth time to, among other things, adjust the
19 dates by which CSI must exercise its option to purchase Vidler’s remaining 500 afy of water
20 appropriated under the Permitted Rights, because CSI was facing possible delays in development.
21 (Respectively, the “4th Amendment” and the “5th Amendment”). True and correct copies of the 4th
22 Amendment and the 5th Amendment are attached as Exhibits “27” and “28” respectively and are
23 incorporated by this reference as if fully set forth herein.

24 64. On November 20, 2017, LINCOLN, VIDLER, and CSI amended the CSI Purchase
25 Agreement for a sixth time to, among other things, affirm that CSI’s standby fee to LINCOLN had
26 been satisfied in full, and further provide that CSI agreed to pay LINCOLN \$749,714 within the next
27 15 years for the dedication of LINCOLN’s water appropriated under the Permitted Rights. (“6th
28 Amendment”). A true and correct copy of the 6th Amendment is attached as Exhibit “29” and is

1 incorporated by this reference as if fully set forth herein.

2 65. In light of the State Engineer's Order 1303 dated January 11, 2019, wherein the State
3 Engineer set a hearing on the LWRFS to, among other things, potentially redefine the basins included
4 in the LWRFS Basins as explained more fully below, LINCOLN, VIDLER, and CSI amended the CSI
5 Purchase Agreement for a seventh time on August 27, 2019. ("7th Amendment"). The purpose of the
6 7th Amendment was to, among other things, provide that CSI's option to purchase VIDLER's
7 remaining 500 afy of appropriated water under the Permitted Rights be extended until the date that is
8 30 days after the date the Nevada State Engineer issues a final order designating that the Kane Springs
9 Basin is NOT a part of the LWRFS Basins. A true and correct copy of the 7th Amendment is attached
10 as Exhibit "30" and is incorporated by this reference as if fully set forth herein.

11 66. On June 15, 2020, the State Engineer issued Order No. 1309, finding, among other things
12 that Kane Springs was now to be included in the LWRFS Basins. The State Engineer's finding
13 necessarily resulted in the termination of CSI's option to purchase VIDLER's 500 afy of the Permitted
14 Rights and LINCOLN's 253.04 afy of the Permitted Rights.

15 **G. The State Engineer's Order 1309 reversed decades of well-settled Nevada law and**
16 **took LINCOLN and VIDLER's vested property rights within Kane Springs.**

17 **(a) For at least 18 years, the State Engineer expressly excluded Kane Springs from**
18 **the LWRFS Basins.**

19 67. The State Engineer's administration of the LWRFS Basins began with Order 1169, issued
20 on March 8, 2002. After the State Engineer held in abeyance several applications filed by the Las Vegas
21 Valley Water District ("LVVWD") and by CSI in Coyote Springs, he issued Order No. 1169, holding
22 in abeyance all pending applications within the LWRFS Basins. In that Order 1169, the State Engineer
23 required that an aquifer test be performed to determine whether the LWRFS Basins could support the
24 additional appropriations of groundwater sought by the then-pending applications and any future
25 applications within those LWRFS Basins. The State Engineer specifically determined the LWRFS
26 Basins were comprised only of the following basins:

- 27 • Coyote Springs Basin;
- 28 • Black Mountains Area Hydrographic Basin (Basin 215) ("Black Mountains Area");
- Garnet Valley Hydrographic Basin (Basin 216) ("Garnet Valley");

- 1 • Hidden Valley Hydrographic Basin (Basin 217) ("Hidden Valley");
- 2 • Muddy River Springs Area Hydrographic Basin (Basin 219) ("Muddy River Springs
- 3 Area"); and
- 4 • Lower Moapa Valley Hydrographic Basin (Basin 220) ("Lower Moapa Valley").

5 68. On April 18, 2002, the State Engineer issued Ruling 5115, which added the California
6 Wash Basin (Basin 218) to the LWRFS Basins and made it subject to Order 1169. A true and correct
7 copy of Ruling 5115 is attached as Exhibit "31" and incorporated by this reference as if fully set forth
8 herein.

9 69. Kane Springs was not a part of the LWRFS Basins and not subject to Order 1169.

10 70. The Order 1169 study participants included LVVWD, SNWA, CSI, Nevada Power
11 Company ("Nevada Power"), Dry Lake Water Company, LLC ("Dry Lake"), Republic Environmental
12 Technologizes, Inc. ("Republic"), Chemical Lime Company, Nevada Cogeneration Associates
13 ("NCA"), and MBOP.

14 71. None of the Order 1169 study participants appealed the State Engineer's determination in
15 Ruling 5712 that Kane Springs would not be included in Order 1169. None of the Order 1169 study
16 participants appealed the State Engineer's determination in Ruling 5712 that LINCOLN and VIDLER
17 were entitled to appropriate and develop 1,000 afy from the Kane Springs Basin. None of the Order
18 1169 study participants appealed the State Engineer's determination in Ruling 5712 that LINCOLN
19 and VIDLER had the most senior water right in the Kane Springs Basin.

20 72. LINCOLN and VIDLER were not and have never been Order 1169 study participants.

21 73. When Ruling 5712 was issued on February 2, 2007, the State Engineer found that
22 LINCOLN and VIDLER were entitled to an appropriation of 1,000 afy, and expressly rejected the
23 request that Kane Springs be included in the LWRFS Basins and Order 1169. When the State Engineer
24 issued Permits 72218, 72219, 72220, and 72221 on May 31, 2007, Ruling 5712 was expressly
25 referenced in each Permit.

26 74. LINCOLN and VIDLER asked State Engineer's Office if LINCOLN and VIDLER should
27 participate in meetings regarding Order 1169 and were told that Kane Springs was not part of the
28 LWRFS Basins study, that LINCOLN and VIDLER do not want to be part of the LWRFS Basins Study,

1 and that LINCOLN and VIDLER could not attend the meetings.

2 75. On November 15, 2010, the Order 1169 study participants began the LWRFS Basins
3 aquifer test. Study participants reported on a quarterly basis the amount of waters being pumped from
4 wells within the carbonate-rock aquifers and the alluvial aquifers in the LWRFS Basins.

5 76. On December 21, 2012, the State Engineer issued Order 1169A, declaring the aquifer tests
6 to be completed on December 31, 2012 after running for 25½ months. A true and correct copy of Order
7 1169A is attached as Exhibit "32" and incorporated by this reference as if fully set forth herein.

8 77. The completed aquifer test included the cumulative pumping of 8,849 afy from within the
9 carbonate rock aquifer in Coyote Springs and a cumulative 15,325 afy pumped from within all of the
10 LWRFS Basins.

11 78. The completed aquifer test did not include any pumping from Kane Springs. Kane Springs
12 was not part of the LWRFS Basins being studied.

13 79. In Order 1169A, the State Engineer gave the Order 1169 study participants until June 28,
14 2013, to file reports and present information gained from the aquifer test to support their estimates of
15 the water available to support appropriation applications within the LWRFS Basins. Specifically, the
16 State Engineer directed the participants to address three questions:

- 17
- 18 • What information was obtained from the study/pumping test?
 - 19 • What were the impacts of the pumping under the pumping test?
 - 20 • What is the availability of additional water resources to support the pending applications
21 in the LWRFS Basins?

22 80. SNWA, FWS, NPS, the United States Department of Interior, Bureau of Land Management
23 ("BLM"), MBOP, MVWD, CSI, Great Basin Water Network ("GBWN"), and the Center for Biological
Diversity ("CBD") submitted reports or letters in response to Order 1169A.

24 81. On January 29, 2014, the State Engineer issued eight Rulings denying applications to
25 appropriate water from within the various LWRFS Basins. Those Rulings found no unappropriated
26 water at the source of supply in each basin, found that each respective proposed use would conflict with
27 existing rights, and found that each proposed use would prove detrimental to the public because it
28 would threaten the endangered Moapa dace:

- 1 • Ruling 6254 denied the applications of LVVWD and CSI for appropriations in the Coyote
2 Springs Basin;
- 3 • Ruling 6255 denied the applications of Dry Lake Water and CSI in the Coyote Springs
4 Basin;
- 5 • Ruling 6256 denied the applications of Bonneville Nevada Corporation, Nevada Power,
6 Dry Lake, and SNWA for appropriations in the Garnet Valley;
- 7 • Ruling 6257 denied the applications of Nevada Power, Dry Lake, and SNWA for
8 appropriations in the Hidden Valley;
- 9 • Ruling 6258 denied the applications of LVVWD, Nevada Power, and MBOP for
10 appropriations in the California Wash Basin;
- 11 • Ruling 6259 denied MVWD's applications for appropriations in the Muddy River Springs
12 Area; and
- 13 • Ruling 6260 denied the applications of NCA #1, NCA #2, and Dry Lake for appropriations
14 in the Black Mountains Area.

15 82. At the time these Rulings were issued in January 2014, Kane Springs continued to be
16 excluded from the LWRFS Basins, and the State Engineer continued to treat the Kane Springs Basin—
17 and LINCOLN and VIDLER's water rights in Kane Springs—as separate and outside of the LWRFS
18 Basins. That differentiation was evidenced by, among other things, the State Engineer's subsequent
19 grant of Permits 82727 and 82728 on August 27, 2014 to change the place of use for Permits 72218
20 and 72219 to include all of the Coyote Springs Basin. Permits 82727 and 82728 continued to state that
21 they were subject to Ruling 5712, in which the State Engineer specifically rejected the inclusion of
22 Kane Springs into the LWRFS Basins and further excluded Kane Springs from the operation of Order
23 1169.

24 83. On January 11, 2019, the State Engineer issued Interim Order 1303, which designated the
25 LWRFS Basins as a "multi-basin area known to share a close hydrologic connection, as a joint
26 administrative unit for purposes of administration of water rights." Under Interim Order 1303, all water
27 rights within the LWRFS were now to be administered based upon their respective dates of priority in
28 relation to all other rights within the multi-basin unit, regardless of the established priority within any

1 individual basin. A true and correct copy of Interim Order 1303 is attached as Exhibit “33” and
2 incorporated by this reference as if fully set forth herein.

3 84. Kane Springs continued to not be included as part of the LWRFS multi-basin area in
4 Interim Order 1303.

5 85. The State Engineer cited N.R.S. § 533.024(1)(e) as authority to designate this multi-basin
6 area a “super-basin”. N.R.S. § 533.024(1)(e) was added by the Nevada Legislature in 2017 to declare
7 the state’s policy to “manage conjunctively the appropriation, use, and administration of all waters of
8 this State regardless of the source of water.”

9 86. Statements of legislative policy from the legislature do not serve as a basis for government
10 action; instead, policy statements inform the interpretation of specific statutes that do authorize specific
11 action. *See e.g., Pawlik v. Deng*, 412 P.3d 68, 71, 134 Nev. Adv. Rep. 11 (2018), citing *J.E. Dunn Nw.,*
12 *Inc. v. Corus Constr. Venture, LLC*, 127 Nev. 72, 79, 249 P.3d 501, 505 (2011).

13 87. No statutory authority exists for the State Engineer to disregard the administration of
14 appropriated water rights on an individual basin-by-basin basis and to fabricate a “super-basin” by
15 amassing multiple individual basins.

16 88. The State Engineer’s contrived super-basin concept usurps the legislative directive that
17 when a basin is or may be over-appropriated, the State Engineer’s duty is to administer that basin in
18 accordance with the priority rights in that basin. Instead, the State Engineer’s super-basin concept
19 subjugates the priority rights and vested property rights of appropriators in basins that are not over-
20 appropriated to the rights of appropriators in over-appropriated basins, in violation of N.R.S. § 534.110.

21 **(b) In June 2020, the State Engineer reversed course and included Kane Springs**
22 **in the LWRFS Basins for the first time.**

23 89. After an administrative hearing, the State Engineer issued Order 1309 on June 15, 2020.
24 A true and correct copy of Order 1309 is attached as Exhibit “34” and incorporated by this reference
25 as if fully set forth herein. In Order 1309, the State Engineer for the first time and in contravention of
26 prior Rulings and Orders included Kane Springs as part of the LWRFS Basins. The State Engineer
27 included Kane Springs even though he specifically continued to find—consistent with Ruling 5712 and
28 additional geophysical data collected by LINCOLN and VIDLER demonstrating that a significant

1 structure exists between the Kane Springs Valley and the Coyote Springs Valley—that “[w]ater level
2 elevations observed near the southern edge of Kane Springs Valley are approximately 60 feet higher
3 than those observed in the majority of carbonate-rock aquifer wells within the LWFS to the south;
4 consistent with a zone of lower permeability.” Exh. 34 at p. 52. Instead of this evidence, the State
5 Engineer relied on evidence that “while attenuated, the general hydrographic pattern observed in
6 southern Kane Springs Valley reflects a response to Order 1169 pumping, consistent with a close
7 hydraulic connection with the LWRFS.” *Id.* However, no pumping in Kane Springs took place as part
8 of the Order 1169 testing.

9 90. In violation of LINCOLN and VIDLER’s vested property rights, the State Engineer
10 imposed a single cumulative pumping cap of 8,000 afy that limited pumping throughout all of the
11 LWRFS Basins—which now included Kane Springs—and disregarded the legislative mandate that
12 each hydrographic basin be considered as a separately appropriable source of water and each basin be
13 administered on priority rights in that basin. N.R.S. § 534.110. The State Engineer administratively
14 manufactured a “super-basin” system of water rights that repudiated the legislatively-established
15 system of appropriation and priority in each individual hydrographic basin.

16 91. The State Engineer’s Order 1309 further allows water users within the LWRFS super-
17 basin—holding no appropriated water rights within Kane Springs—to move their points of diversion
18 from outside of Kane Springs into Kane Springs because pumping in Kane Springs is farther away from
19 springs where these users are currently pumping.

20 92. The State Engineer’s Order improperly prefers the rights of water users in the urban Las
21 Vegas area over water users in rural counties, such as Lincoln County, by allowing the water
22 appropriated within Kane Springs in Lincoln County to now be used and transported by urban water
23 users into the Las Vegas area. By preferring Las Vegas, the State Engineer’s order curtails the ability
24 of rural counties, such as Lincoln County, to obtain their needed water resources for economic
25 development.

26 93. LINCOLN and VIDLER own the most senior water rights within Kane Springs, but the
27 State Engineer disregarded LINCOLN and VIDLER’s priority by subjugating their senior water rights
28 to be subordinate to water users with no appropriated water rights within Kane Springs. The State

1 Engineer has rendered LINCOLN and VIDLER's most senior water rights in Kane Springs into one of
2 the lowest priority water rights in the newly invented LWRFS super-basin, thereby directly and
3 indirectly transferring LINCOLN and VIDLER's most senior water rights within Kane Springs to other
4 water users within the LWRFS super-basin who have no appropriated rights within Kane Springs.

5 94. In Order 1309, the State Engineer again cited his authority to administratively create a
6 "super-basin" as arising from the 2017 amendment to N.R.S. § 533.024(1)(e). As was the case in 2019,
7 no statutory authority exists that authorizes the State Engineer to fabricate a "super-basin," or to
8 subordinate a senior priority right within one basin to a water right established in a different basin.

9 95. The State Engineer stripped LINCOLN and VIDLER of their vested property rights,
10 physically prohibited LINCOLN and VIDLER from pumping their senior priority water rights in Kane
11 Springs, transferred LINCOLN and VIDLER's senior priority water rights in Kane Springs to other
12 water users that had no water rights in Kane Springs, and rendered LINCOLN and VIDLER's vested
13 property rights valueless.

14 96. The State Engineer's use and reliance on the statement of policy in N.R.S. § 533.024(1)(e)
15 in Order 1309 revoked *ex post facto* LINCOLN and VIDLER's vested property and contractual rights.

16 97. The State Engineer also predicated Order 1309 on a stated concern that, if appropriations
17 were not limited across the entire newly invented super-basin, groundwater pumping could potentially
18 lead to some incidental take of the Moapa dace, and thus eventually accrue liability under the
19 Endangered Species Act to the State of Nevada. Exh. 34, at pp. 45-46. The State Engineer is not
20 empowered by or charged with enforcement of the Endangered Species Act. In 2006, the FWS—the
21 federal agency charged with protecting the Moapa dace under the Endangered Species Act—entered
22 into an Amended Stipulation for Withdrawal of Protests, and in 2008 FWS issued to LINCOLN and
23 VIDLER its Biological Opinion (File Nos. 84320-2008-F-0007 and 84310-2008-I-0216), which found
24 that LINCOLN and VIDLER pumping their vested water rights within Kane Springs would create no
25 significant impact and would not harm the Moapa dace or threaten to conflict with Muddy River
26 decreed rights.

27 98. Nevada law does not authorize the State Engineer to designate a multi-basin area and
28 effectively reprioritize basin-specific water rights by administering them based upon their respective

1 dates of priority in relation to other rights within the multi-basin groundwater area, or to designate a
2 multi-basin area via an ad hoc ruling.

3 99. The State Engineer has taken the vested property rights of LINCOLN and VIDLER by
4 physically prohibiting LINCOLN and VIDLER from pumping their senior vested water rights within
5 Kane Springs, by transferring their senior priority water rights within Kane Springs to other water users
6 that have no water rights in Kane Springs, and rendering their senior priority water rights within Kane
7 Springs without any economic value.

8 **FIRST CLAIM FOR RELIEF**

9 **(Inverse Condemnation)**

10 100. LINCOLN and VIDLER reallege and incorporate by reference the allegations set forth in
11 paragraphs 1 through 99 above as if fully set forth herein.

12 101. State Engineer Ruling 5712 and the Permitted Rights established LINCOLN and
13 VIDLER's senior priority water rights to 1,000 afy within Kane Springs. LINCOLN continues to own
14 the vested property rights to appropriate 253.04 afy of water within Kane Springs. VIDLER continues
15 to own the vested property rights to appropriate 500 afy of water within Kane Springs.

16 102. The State Engineer has taken LINCOLN and VIDLER's vested property rights without
17 compensation, in violation of the Fifth and Fourteenth Amendments of the United States Constitution,
18 and in violation of Article 1, Section 8(3) of the Nevada Constitution.

19 103. By Order 1309, the State Engineer has prohibited LINCOLN and VIDLER from
20 physically diverting and using any of their vested property rights granted to them in Ruling 5712 and
21 the Permitted Rights.

22 104. By Order 1309, the State Engineer has completely dispossessed LINCOLN and VIDLER
23 of their senior priority water rights because those rights cannot be used for any purposes.

24 105. By Order 1309, the State Engineer has completely deprived LINCOLN and VIDLER all
25 economical beneficial use of their property.

26 106. By Order 1309, the State Engineer has rendered LINCOLN and VIDLER's vested property
27 rights to be of no economic value.

28 107. The total curtailment of LINCOLN and VIDLER's rights to pump within Kane Springs

1 denies LINCOLN and VIDLER all economically viable use of their property.

2 108. The State Engineer's Order 1309 renders impossible the exercise of LINCOLN and
3 VIDLER's water rights.

4 109. The total curtailment of LINCOLN and VIDLER's right to pump their senior priority water
5 rights within Kane Springs substantially interferes with LINCOLN and VIDLER's investment-backed
6 expectations for their vested property rights.

7 110. The total curtailment of LINCOLN and VIDLER's right to pump within Kane Springs
8 fails to substantially advance a legitimate governmental interest because the State Engineer
9 previously found that pumping within Kane Springs was not shown to have a substantial effect on the
10 water levels of Muddy River Springs.

11 111. The prevention of incidental "take" of animals in furtherance of the Endangered Species
12 Act does not constitute a legitimate government reason for the State Engineer to take LINCOLN and
13 VIDLER's water right without just compensation. The State Engineer has unfairly saddled LINCOLN
14 and VIDLER to bear a public burden, protecting the Moapa dace that should be borne by the public as
15 a whole rather than by the LINCOLN and VIDLER.

16 112. LINCOLN and VIDLER are entitled to just compensation under the Fifth and Fourteenth
17 Amendments of the United States Constitution, and under of Article 1, Section 8(3) of the Nevada
18 Constitution.

19 113. LINCOLN and VIDLER are entitled to attorneys' fees incurred under N.R.S. § 37.185.

20 114. LINCOLN and VIDLER are entitled to incurred costs, including expert witness costs,
21 under N.R.S. § 18.020.

22 115. LINCOLN and VIDLER are entitled to prejudgment and post judgment interest on all just
23 compensation, damages, attorneys' fees, and costs awarded in this action.

24 **WHEREFORE**, LINCOLN and VIDLER pray for judgment in their favor, as follows:

- 25 a. That the Court award LINCOLN and VIDLER their just compensation in excess of
26 \$15,000, including the fair market value of the vested water rights taken, valued as of
27 the date of the takings;
28

- 1 b. That the Court award LINCOLN and VIDLER their incurred attorneys' fees pursuant
2 to N.R.S. § 37.185, and award their incurred costs and expenses pursuant to N.R.S.
3 § 18.020;
4 c. That the Court award prejudgment and postjudgment interest on all amounts awarded
5 LINCOLN and VIDLER; and
6 d. Awarding such other and further relief as this Court deems just and proper.

7
8 **SECOND CLAIM FOR RELIEF**

9 **(Inverse Condemnation Seeking Injunctive Relief for Violation of N.R.S. § 37.010 (2))**

10 116. LINCOLN and VIDLER reallege and incorporate by reference the allegations set forth in
11 paragraphs 1-115 above as if fully set forth herein.

12 117. LINCOLN and VIDLER own senior priority water rights within Kane Springs, and these
13 water rights are vested property rights.

14 118. The State Engineer has effectively transferred LINCOLN and VIDLER's senior priority
15 water rights within Kane Springs to other water users with no appropriated water rights in Kane.

16 119. N.R.S. § 37.010(2) provides that "[n]otwithstanding any other provision of law and except
17 as otherwise provided in this subsection, the public uses for which private property may be taken by
18 the exercise of eminent domain do not include the direct or indirect transfer of any interest in the
19 property to another private person or entity."

20 120. None of the exceptions set forth in N.R.S. § 37.010(2) apply to the transfer of LINCOLN
21 and VIDLER's Kane Springs vested senior water rights in this case.

22 121. The State Engineer's transfer of LINCOLN and VIDLER's senior vested water rights in
23 Kane Springs constitutes an impermissible use of eminent domain to directly or indirectly transfer
24 property in violation of N.R.S. § 37.010 (2).

25 122. Similarly, the law does not allow for property being put to a public use to be condemned
26 in order to be put to the same public use by another public or private entity. *NL Indus. v. Eisenman*
27 *Chem. Co.*, 98 Nev. 253 (1982).

28 123. Prior to Order 1309, LINCOLN and VIDLER had put their senior-priority vested water

1 rights within Kane Springs to public use.

2 124. The State Engineer's Order 1309 illegally took LINCOLN and VIDLER's senior-priority
3 vested water rights within Kane Springs in order to transfer those vested senior water rights to other
4 entities to be used for the same public use. The State Engineer is prohibited from doing so by Nevada
5 law.

6 125. LINCOLN and VIDLER are entitled to enjoin the State Engineer from transferring their
7 vested property rights to other water users with no right to appropriate water within Kane Springs.

8 126. LINCOLN and VIDLER are entitled to attorneys' fees incurred under N.R.S. § 37.185.

9 127. LINCOLN and VIDLER are entitled to their incurred costs, including expert witness
10 costs, under N.R.S. § 18.020.

11 **WHEREFORE**, LINCOLN and VIDLER pray for judgment in their favor, as follows:

12 a. That the Court enter an injunction:

- 13 i. to permanently enjoin the State Engineer from enforcing Order 1309 against
14 LINCOLN and VIDLER;
- 15 ii. to permanently enjoin the State Engineer from including Kane Springs in the
16 LWRFS Basins to the extent that doing so prohibits, limits, or otherwise
17 interferes with LINCOLN and VIDLER from using their Permitted Rights;
- 18 iii. to permanently enjoin the State Engineer from directly or indirectly transferring
19 LINCOLN and VIDLER's senior priority water rights to other water users, who
20 have no appropriation rights within Kane Springs in violation of N.R.S. §
21 37.010 (2); and
- 22 iv. to permanently enjoin the State Engineer from taking LINCOLN and
23 VIDLER's senior priority water rights and transferring those vested property
24 rights to others water users to be used the for the same public use for which
25 LINCOLN and VIDLER have the right to appropriate the Kane Springs water;

26 b. That the Court award LINCOLN and VIDLER their incurred attorneys' fees pursuant
27 to N.R.S. § 37.185, and award their incurred costs and expenses pursuant to N.R.S.
28 § 18.020;

- 1 c. That the Court award prejudgment and postjudgment interest on all amounts awarded
2 LINCOLN and VIDLER; and
3 d. Awarding such other and further relief as this Court deems just and proper.
4

5 **THIRD CLAIM FOR RELIEF**

6 **(Breach of Contract)**

7 128. LINCOLN and VIDLER reallege and incorporate by reference the allegations set forth in
8 paragraphs 1-127 above as if fully set forth herein.

9 129. Once executed, the Kane Springs Settlement Agreement between VIDLER, LINCOLN,
10 and the State Engineer created a binding contract that defined the steps that the State Engineer was
11 required to follow when acting upon LINCOLN and VIDLER's groundwater applications.

12 130. The State Engineer breached the Kane Springs Settlement Agreement by failing to follow
13 the Kane Spring Settlement Agreement procedures while considering the 2006 Applications for
14 approval.

15 131. The Kane Springs Settlement Agreement required that, as set forth in the Tule Desert
16 Settlement Agreement and incorporated into the Kane Springs Settlement Agreement, the "following
17 steps will be followed for all current and future applications to appropriate groundwater in hydrographic
18 basins located wholly or partially within the boundaries of Lincoln County, filed by the District and
19 Vidler, either individually or jointly":

- 20 • The State Engineer must require "a hydrological study to address the water resources
21 of the particular hydrographic basin unless otherwise agreed";
22 • As set forth in N.R.S. § 533.368(4)(a), the State Engineer must consult with LINCOLN
23 and VIDLER "concerning the scope and progress of the study and to determine the
24 criteria necessary to adequately evaluate the applications";
25 • The State Engineer "shall set forth in writing as part of the criteria, any other
26 procedures, policies, or methodologies that will be used to determine the amount of
27 groundwater that is appropriable in the basins in which the applications are filed";
28 • If the State Engineer found that additional studies, criteria, or scientific information

1 would be "required to determine the amount of groundwater that is appropriable in the
2 basins in which the applications are filed, then the State Engineer shall identify the
3 additional studies, criteria, or scientific information necessary and inform" LINCOLN
4 and VIDLER of those requirements so that LINCOLN and VIDLER could then
5 develop studies and reports relating to the identified criteria;

- 6 • The State Engineer must agree to a reasonable extension of time to complete any
7 approved studies that were in progress;
- 8 • If LINCOLN and VIDLER had not, in the time frames provided, "submitted the
9 required hydrologic study," the State Engineer was empowered to "move forward
10 under the provisions of N.R.S. § 533.368 with any study the State Engineer considers
11 necessary for consideration of pending applications in the relevant hydrographic
12 basins;"
- 13 • The State Engineer must use an independent third party Reviewing Consultant selected
14 by the State Engineer and paid for by LINCOLN and/or VIDLER, as set forth in N.R.S.
15 § 533.368(3), to review and analyze the study or studies submitted to the State Engineer
16 by the District and/or Vidler;
- 17 • The Reviewing Consultant must serve as an advisor to the State Engineer on a
18 hydrologic study prior to the State Engineer taking action on any application filed by
19 the District and/or Vidler, unless the State Engineer determines that Reviewing
20 Consultant is not needed, in which case the appointment of a Reviewing Consultant
21 can be waived by agreement of the Parties;
- 22 • Unless the Parties waive the appointment of a Reviewing Consultant, the State
23 Engineer must consult with the Reviewing Consultant prior to issuing a ruling on an
24 application; and
- 25 • "After a hydrologic study is completed," the State Engineer shall make the
26 determination of the amount of water to be appropriated under each application, taking
27 into account the criteria established under the procedures agreed to by the Parties, the
28 report of the Reviewing Consultant, the comments filed with the State Engineer, and

1 the criteria established in the Nevada Revised Statutes; recognizing that the final
2 determination of the water available for appropriation is the sole authority of the State
3 Engineer. (p.8).

4 132. The State Engineer failed to follow the following procedures that he agreed to follow in
5 the Kane Springs Settlement Agreement:

- 6 • The State Engineer did not require a hydrological study to address the water resources
7 of Kane Springs;
- 8 • The State Engineer did not consult with LINCOLN or VIDLER concerning the scope
9 and progress of the study or to determine the criteria necessary to adequately evaluate
10 the applications;
- 11 • The State Engineer did not set forth in writing as part of the criteria, any other
12 procedures, policies, or methodologies that will be used to determine the amount of
13 groundwater that is appropriable in Kane Springs;
- 14 • The State Engineer did not identify any additional studies, criteria, or scientific
15 information necessary to determine the amount of groundwater appropriable within
16 Kane Springs, and did not inform LINCOLN and VIDLER of those requirements so
17 that LINCOLN and VIDLER could then develop such studies and reports relating to
18 the identified criteria;
- 19 • The State Engineer did not provide LINCOLN and VIDLER a reasonable timeframe
20 within which to conduct any studies or reports on the identified criteria within Kane
21 Springs, nor did the State Engineer itself conduct any such study or report within Kane
22 Springs.
- 23 • The State Engineer did not use an independent third party Reviewing Consultant
24 selected by the State Engineer and paid for by LINCOLN and/or VIDLER as set forth
25 in N.R.S. § 533.368(3);
- 26 • The State Engineer did not inform LINCOLN or VIDLER that a determination had
27 been made that the Reviewing Consultant was not needed, so that the requirement could
28 be waived by agreement of the Parties;

- 1 • LINCOLN and VIDLER did not agree to waive the requirement of an independent third
- 2 party Reviewing Consultant, and the State Engineer did not consult with a Reviewing
- 3 Consultant before issuing a ruling on the 2006 Applications; and
- 4 • The State Engineer did not make a determination of the amount of water to be
- 5 appropriated within Kane Springs that took into account the criteria established under
- 6 the procedures agreed to by the Parties, the report of the Reviewing Consultant, the
- 7 comments filed with the State Engineer, and the criteria established in the Nevada
- 8 Revised Statutes.

9 133. In reliance on the Kane Springs Settlement Agreement, LINCOLN and VIDLER continued
10 collecting and continue to collect data and performing studies within Kane Springs for the additional
11 appropriations under the 2006 Applications.

12 134. LINCOLN and VIDLER have met with the State Engineer to discuss the data collection
13 and studies being performed.

14 135. Kane Springs was not included in the Order 1169 aquifer test conducted between
15 November 15, 2010 and December 31, 2012.

16 136. No data relating to pumping in Kane Springs was provided to the State Engineer during
17 the aquifer test between November 15, 2010 and December 31, 2012.

18 137. LINCOLN and VIDLER were not parties to the LWRFS proceedings prior to 2019 and
19 were excluded from hearings, filings, and comments relating to those proceedings and which ultimately
20 determined the fate of LINCOLN and VIDLER's Applications.

21 138. The State Engineer's ruling in Order 1309 was based on the data collected during the Order
22 1169 aquifer test that was conducted from November 15, 2010 through December 31, 2012. The Order
23 1169 aquifer test did not include data on Kane Springs collected by LINCOLN and VIDLER.
24 LINCOLN and VIDLER presented their collected data regarding Kane Springs at the hearing for Order
25 1309, but the State Engineer did not rely on that data in issuing Order 1309.

26 139. The State Engineer's failure to abide by the protocols it agreed to follow in the Kane
27 Springs Settlement Agreement for determining the amount of water that could be appropriated within
28 Kane Springs under the 2006 Applications materially breached the Kane Springs Settlement

1 Agreement.

2 140. As a direct and proximate result of the State Engineer's breach of the Kane Springs
3 Settlement Agreement, LINCOLN and VIDLER have suffered direct and indirect damages.

4 141. LINCOLN and VIDLER suffered damages in the amount of water rights they would have
5 obtained had the State Engineer followed and not breached the agreements in the Kane Springs
6 Settlement Agreement. The point of the Kane Springs Settlement Agreement was to give LINCOLN
7 and VIDLER opportunity to conduct credible, peer-reviewed scientific in-basin studies that would
8 establish and support the actual perennial yield value within Kane Springs of between 4,000 to 5,000
9 afy; a value independently determined by many other researchers and which has been accepted by the
10 Nevada State Engineer through separate administrative proceedings.

11 142. LINCOLN and VIDLER's 2006 Applications were the next highest in priority within Kane
12 Springs behind the Permitted Rights. No other water rights have been granted in Kane Springs besides
13 the 1,000 afy of water rights granted to LINCOLN and VIDLER in the Permitted Rights. Given the
14 actual perennial yield within Kane Springs of at least 4,000 total afy, LINCOLN and VIDLER are
15 entitled to damages based on at least the minimum amount of 3,000 additional afy that should have
16 been awarded under the 2006 Applications.

17 143. In 2008, LINCOLN and VIDLER entered into the 1st Amendment to the CSI Purchase
18 Agreement and set a price of \$8,055.52 per afy of water for the Kane Springs water being sold under
19 the Permitted Rights. The price per acre-foot of water has increased dramatically since 2008 and would
20 be substantially higher 12 years later in 2020. At a minimum, the proportional increase based on the
21 interim rise in the consumer price index would place the value of the water as of June 15, 2020 at
22 \$9,776.10 per acre-foot. At a minimum, applying the price from 2008, LINCOLN and VIDLER are
23 entitled to damages for the minimum of 3,000 afy of water that LINCOLN and VIDLER should have
24 been able to appropriate and CSI would have purchased, at the rate of \$8,055.52 to \$9,776.10 per acre-
25 foot, which results in a minimum amount of damages between \$24,166,560.00 to \$29,328,300, less the
26 costs LINCOLN and VIDLER incurred and will incur to develop the water.

27 144. Alternatively, LINCOLN and VIDLER are entitled to recover the amounts they have
28 incurred to seek the appropriation of the Kane Springs water under the 2006 Applications in the amount

1 to \$543,000.

2 145. Alternatively, LINCOLN and VIDLER are entitled to seek specific performance of the
3 Kane Springs Settlement Agreement and have the State Engineer evaluate the 2006 Application in
4 conformance with the procedures and methodologies set forth in the Kane Springs Settlement
5 Agreement.

6 146. LINCOLN and VIDLER are entitled to prejudgment and postjudgment interest on all
7 damages, attorneys' fees, and costs awarded at trial.

8 147. LINCOLN and VIDLER have been required to engage the services of counsel to pursue
9 their rights, and as a proximate and necessary result of the STATE ENGINEER's illegal conduct
10 alleged above, Plaintiffs are entitled to reasonable attorney's fees and costs as special and foreseeable
11 damages, or in the alternative, as costs of suit.

12 148. LINCOLN and VIDLER are entitled to costs pursuant to N.R.S. § 18.020.

13 **WHEREFORE**, LINCOLN and VIDLER pray for judgment in their favor, as follows:

- 14 a. That the Court award LINCOLN and VIDLER damages in excess of \$15,000 for the
15 State Engineer's breach of the Kane Springs Settlement Agreement, in an amount
16 proven at trial, for the value of the groundwater rights that would have been
17 appropriated to LINCOLN and VIDLER under the 2006 Applications had the State
18 Engineer followed and not breached the Kane Springs Settlement Agreement;
- 19 b. Alternatively, that the Court award LINCOLN and VIDLER their damages based on
20 the amounts LINCOLN and VIDLER spent to pursue the 2006 Applications prior to
21 the State Engineer's breach of the Kane Springs Settlement Agreement;
- 22 c. Alternatively, that the Court require the State Engineer's specific performance of the
23 Kane Springs Settlement Agreement by vacating Order 1309 as it applies to Kane
24 Springs, removing Kane Springs as part of the LWRFS Basins, reinstating the 2006
25 Applications and requiring the State Engineer to comply with the Kane Springs
26 Settlement Agreement and evaluate the 2006 Applications under the required
27 procedures;
- 28

- 1 d. That the Court award LINCOLN and VIDLER their incurred attorneys' fees as
2 damages and award costs and expenses under N.R.S. § 18.020;
3 e. That the Court award prejudgment and postjudgment interest on all amounts awarded
4 LINCOLN and VIDLER; and
5 f. Awarding such other and further relief as this Court deems just and proper.

6 **AFFIRMATION**

7 The undersigned does hereby affirm that the preceding document **DOES NOT** contain the social
8 security number of any person.

9
10 DATED this 2 day of Sept, 2020.

11 By: 

12 KAREN A. PETERSON, ESQ.
13 Nevada State Bar No. 366
14 ALLISON MacKENZIE, LTD.
15 402 North Division Street
16 Carson City, Nevada 89703
17 Telephone: (775) 962-8073
18 Email: kperteson@allisonmackenzie.com
19 Attorney for Plaintiff VIDLER WATER
20 COMPANY

21 -and-

22 By: 

23 DYLAN V. FEHNER, ESQ.
24 Nevada State Bar No. 9020
25 LINCOLN COUNTY DISTRICT ATTORNEY
26 181 North Main Street, Suite 205
27 P.O. Box 60
28 Pioche, Nevada 89043
Telephone: (775) 962-8073
Email: dfrehner@lincolncountynv.gov

Attorney for Plaintiff, LINCOLN COUNTY
WATER DISTRICT

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(Submitted by CD)

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IN THE OFFICE OF THE STATE ENGINEER
OF THE STATE OF NEVADA

1169

ORDER

HOLDING IN ABEYANCE CARBONATE-ROCK AQUIFER SYSTEM GROUNDWATER APPLICATIONS PENDING OR TO BE FILED IN COYOTE SPRINGS VALLEY (BASIN 210), BLACK MOUNTAINS AREA (BASIN 215), GARNET VALLEY (BASIN 216), HIDDEN VALLEY (BASIN 217), MUDDY RIVER SPRINGS aka UPPER MOAPA VALLEY (BASIN 219), LOWER MOAPA VALLEY (BASIN 220), AND FOR FURTHER STUDY OF THE APPROPRIATION OF WATER FROM THE CARBONATE-ROCK AQUIFER SYSTEM, LINCOLN AND CLARK COUNTIES, NEVADA.

WHEREAS, the Nevada State Engineer is designated by the Nevada Legislature to perform the duties related to the management of the water resources belonging to the people of the State of Nevada.¹

WHEREAS, the State Engineer is empowered to make such reasonable rules and regulations as may be necessary for the proper and orderly execution of the powers conferred by law.²

WHEREAS, the State Engineer is empowered to conduct such studies as are necessary.³

WHEREAS, a large portion of the State of Nevada consisting of approximately 50,000 square miles of sparsely populated land is underlain by significant carbonate-rock sequences.⁴

WHEREAS, the carbonate-rock sequences contain groundwater aquifers, which are believed to contain significant, but undetermined, quantities of ground water.

WHEREAS, many persons or entities have filed water right applications requesting permission to appropriate substantial quantities of underground water from the carbonate-rock aquifer system.

WHEREAS, in 1984, the Water Resources Division of the United States Department of Interior, Geological Survey proposed a 10-year investigation of the entire Carbonate Terrane, which includes the carbonate-rock aquifers of the areas referenced above. This study was proposed because the water resources of the Carbonate Terrane were not well defined, the hydrology and geology of the area are complex, and data was sparse.⁵

¹ See, Nevada Revised Statutes chapters 532, 533, 534, 535 and 536.

² NRS § 532.120.

³ NRS § 532.165(1), 533.368 and 533.370(2).

⁴ Michael D. Dettinger, Distribution of Carbonate-Rock Aquifers in Southern Nevada and the Potential for their Development, Summary of Findings, 1985-1988, Summary Report No. 1, United States Geological Survey, Department of Interior and Desert Research Institute, University of Nevada System, p. 3, 1989. See also, Memorandum dated August 3, 1984, from Terry Katzer, Nevada Office Chief, Water Resources Division, United States Department of Interior Geologic Survey, Carson City, Nevada, to Members of the Carbonate Terrane Study, Attachment p. 8, which indicates that the area underlain by significant carbonate-rock sequences in Nevada is over 40,000 square miles of sparsely populated land, and includes 106 hydrographic areas and basins.

⁵ Memorandum dated August 3, 1984, from Terry Katzer, Nevada Office Chief, Water Resources Division, United States Department of Interior Geologic Survey, Carson City, Nevada, to

WHEREAS, it has been known since 1984 that to arrive at some reasonable understanding of the carbonate-rock aquifer system, substantial amounts of money would be required to develop the science, a significant period of study would be required, and that "unless this understanding is reached, the development of carbonate water is risky and the resultant effects may be disastrous for the developers and current users."⁶

WHEREAS, the United States Geological Survey has indicated that given the multiple possible avenues of hydrologic connection between the various aquifers and flow systems, and the uncertainties of recharge and discharge mechanisms and processes, an investigation of the hydrology of the carbonate-rock aquifer system in Nevada is undoubtedly a difficult undertaking.

WHEREAS, an investigation of the carbonate-rock aquifer system is additionally complicated by factors including:⁷

- basic hydrologic data such as groundwater levels in the basin-fill aquifers and the carbonate-rock aquifers, and reliable flow measurements for important springs and major streams are scarce or infrequently obtained in much of the area;
- secondary hydrologic and other data, such as hydraulic parameters, geophysical and geochemical, are lacking in many areas;
- the geometry, properties, and boundaries of the carbonate-rock and basin-fill reservoirs are generally unknown, and definition of these properties can be expensive and difficult;
- climatic conditions today are inadequately defined (particularly at higher altitudes) and conditions during the development of the flow paths within the deep-rock aquifers and flow paths within the carbonate-rock aquifer are even more uncertain;
- uncertainties and inaccuracies exist in current methods of estimating precipitation;
- uncertainties and inaccuracies exist in current methods of estimating groundwater inflow and recharge;
- uncertainties and inaccuracies exist in current methods of estimating groundwater outflow and evaporative discharge;
- only a small number of wells tap the deep carbonate-rock aquifer system;
- because there has been no significant historical pumping of ground water from the carbonate-rock aquifer system, groundwater models can only be used as a limited predictive tool for estimating the principle location and magnitude of the impacts of pumping ground water from the system;
- limited stresses on the water resources of the area under current development conditions allow hydrologists information only on the narrow band of system responses to natural conditions; and
- the relationship between geothermal systems and the deep carbonate-rock aquifers and groundwater flow systems is not well understood.

WHEREAS, in 1985, the Nevada Legislature authorized a program for the study and testing of the carbonate-rock aquifer system of eastern and southern Nevada. The program was a cooperative effort between the State of Nevada and the Federal Government. The overall plan for the program was to study the carbonate-rock aquifers of southern, east-central, and northeastern Nevada as separate phases of work, with a summary of findings to be prepared at the end of each

Members of the Carbonate Terrane Study.

⁶ Ibid.

⁷ Id., Attachment p. 7.

phase. A report, Distribution of Carbonate-Rock Aquifers in Southern Nevada and the Potential for their Development, Summary of Findings, 1985-1988,⁸ summarized the findings of the first phase of the study, which assessed the resources of the carbonate-rock aquifers of southern Nevada. The summary brought together results from more than 20 technical reports produced during the study. The summary indicated that:

The rocks that compose the carbonate-rock aquifers are layers of limestone and dolomite that were deposited hundreds of millions of years ago in much of the eastern Great Basin. Subsequently, the carbonate rocks were much deformed; as a result, they no longer exist as continuous layers beneath the region. Instead, they have been pulled apart to form a few large areas of thick and relatively continuous carbonate rocks. Separating these areas are noncarbonate rocks, within which are isolated mountain-sized blocks of carbonate rock.

Beneath southern Nevada, the thick carbonate-rock layers are continuous enough to transmit ground water at regional scales only beneath a north-south "corridor" 60-90 miles wide that extends southward from east-central Nevada to and beyond the Spring Mountains area west of Las Vegas. Within this corridor are the two major regional flow systems of southern Nevada: the Ash Meadows-Death Valley system and the White River-Muddy River Springs system. These flow systems link the ground water beneath dozens of valleys and over distances exceeding 200 miles. Flow in these systems probably is concentrated along highly transmissive zones associated with (1) recently active faults and (2) confluences of flow near major warm-water springs. Outside of the corridor, the carbonate rocks are present primarily as isolated blocks that form aquifers of limited extent, recharged mostly by local precipitation.

* * *

Large-scale development (sustained withdrawals) of water from the carbonate-rock aquifers would result in water-level declines and cause the depletion of large quantities of stored water. Ultimately, these declines would cause reductions in the flow of warm-water springs that discharge from the regional aquifers. Storage in other nearby aquifers also might be depleted, and water levels in those other aquifers could decline. In contrast, isolated smaller ground-water developments, or developments that withdraw ground water for only a short time, may result in water-level declines and springflow reductions of manageable or acceptable magnitude.

Confidence in predictions of the effects of development, however, is low; and it will remain low until observations of the initial hydrologic results of development are analyzed. A strategy of staging developments gradually and adequately monitoring the resulting hydrologic conditions would provide information that eventually could be used to improve confidence in the predictions.⁹

WHEREAS, because assurances that the adverse effects of development will not overshadow the benefits cannot be made with a high degree of confidence, development of the carbonate-rock aquifer system must be undertaken in gradual stages together with adequate

⁸ Michael D. Dettinger, Distribution of Carbonate-Rock Aquifers in Southern Nevada and the Potential for their Development, Summary of Findings, 1985-1988, Summary Report No. 1, United States Geological Survey, Department of Interior and Desert Research Institute, University of Nevada System, Forward, 1989.

⁹ *Id.*, pp. 1-2.

monitoring in order to predict, through the use of a calibrated model, the effects of continued or increased development with a higher degree of confidence.

WHEREAS, staging development gradually means not developing the resources in one large step, but rather starting with small projects that are possibly augmented gradually if conditions and confidence warrant. This approach allows the effects of development to be observed and analyzed continually, so that the benefits and adverse effects of development can be judged and the effects reversed or mitigated if they prove to be detrimental to existing rights and the environment. This approach would hopefully avoid the havoc that could be created by the curtailment of water use by those who have come to rely on it if impacts occur requiring curtailment of the water use.

WHEREAS, the 1995 Water-Resources Investigations Report 91-4146¹⁰ estimates the total water budget of all southern Nevada aquifers from the natural recharge to the mountains and subsurface inflow to the study area¹¹ to be about 160,000 acre-feet annually, and discharges from major discharge areas to be about 77,000 acre-feet annually.¹²

WHEREAS, it is believed that all of the recharge and subsurface inflow cannot be captured for use.

WHEREAS, in July and August of 2001 nearly four weeks of public administrative hearings were conducted on applications filed by the Las Vegas Valley Water District (Applications 54055 - 54059, inclusive) and Coyote Springs Investment, LLC (Applications 63272 - 63276, inclusive, and 63867 - 63876, inclusive), which together request to appropriate approximately 135,000 acre-feet of water annually from the carbonate-rock aquifer system within the Coyote Springs Valley Hydrographic Basin.¹³

WHEREAS, testimony and evidence from the administrative hearing on the Las Vegas Valley Water District's applications indicates that using the standard Maxey-Eakin technique for estimation of groundwater recharge from precipitation, the recharge for the Coyote Springs Valley, Muddy River Springs, Hidden Valley, Garnet Valley, Black Mountains and Lower Moapa Valley

¹⁰ Michael D. Dettinger, et al., Distribution of Carbonate-Rock Aquifers and the Potential for Their Development, Southern Nevada and Adjacent Parts of California, Arizona and Utah, U.S. Geological Survey, Water-Resources Investigations Report 91-4146, p. 50, 1995.

¹¹ The study area is defined on p. 5 of Water-Resources Investigations Report 91-4146 to be most of southern Nevada south of Tonopah and Pioche.

¹² Discharge areas are identified as Muddy River Springs 36,000 acre-feet annually (afa) of spring flow, Blue Point Spring 240 afa of spring flow, Rogers Spring 920 afa of spring flow, Frenchman Mountain 2,100 afa of underflow toward Colorado River, Pahrump Valley 18,000 afa of underflow to California, Ash Meadows 17,000 afa of spring flow and evapotranspiration, Amargosa Desert 3,000 afa of underflow to Death Valley, and Grapevine Canyon 400 afa of underflow to Death Valley. Water-Resources Investigations Report 91-4146 at 53.

¹³ It is noted that at the administrative hearing on Coyote Springs Investment, LLC Applications 63272 - 63276, inclusive, and 63867 - 63876, inclusive, the applicant indicated they are requesting the State Engineer "to issue the permits as requested but limit their full use until the monitoring and mitigation program is in effect." Transcript, public administrative hearing before the State Engineer, August 20, 2001, p. 58. However, the applicant further indicated that it requested that a minimum of four permits be issued, two in each county, with the second permit in each county to be used to stress the aquifer. Two permits for a total amount of 14,478 afa would be for development, two permits for a total amount of 14,478 afa would be to stress the aquifer under some temporary development. Transcript, public administrative hearing before the State Engineer, August 20, 2001, pp. 91-96. This is after the 27,504 afa requested by the Las Vegas Valley Water District.

areas combined is approximately 3,550 acre-feet annually. Using the modified Maxey-Eakin technique introduced at the administrative hearing (known as the Donovan-Katzer 2000 technique), the recharge is estimated at approximately 6,761 acre-feet annually for the combined areas.¹⁴

WHEREAS, testimony and evidence from the administrative hearing on the Las Vegas Valley Water District's applications indicates that approximately 50,000 acre-feet of groundwater inflow comes into the Coyote Springs Valley from northern groundwater basins and approximately 53,000 acre-feet annually outflows¹⁵ from Coyote Springs Valley of which a portion may be available for capture from that groundwater underflow. While testimony presented indicated a belief that significant quantities of water may be available for capture from storage, it is unknown what quantity that would be and if any underground water could be appropriated without unreasonable and irreversible impacts.¹⁶

WHEREAS, testimony and evidence from the administrative hearing on the Las Vegas Valley Water District's applications indicates that a portion of the ground water outflow from Coyote Springs Valley is believed to discharge at a rate of approximately 37,000 acre-feet annually at the Muddy River Springs area and approximately 16,000 to 17,000 acre-feet annually flows to groundwater basins further south.¹⁷ This 37,000 acre-feet is counted as part of the 53,000 acre-feet outflow from Coyote Springs Valley resulting in 16,000-17,000 acre-feet annual flow that bypasses the Muddy River Springs area.

WHEREAS, these referenced large springs located near the central part of the Upper Moapa Valley, which that collectively discharge approximately 37,000 acre-feet annually of underground water, are fully appropriated pursuant to the Muddy River Decree.¹⁸ It is believed that the source of water discharged originates mainly from the carbonate-rock aquifer system, but it is unknown if the discharge originates solely from the White River Flow System or is also influenced by discharge from the Meadow Valley Flow System or if there is influence from the alluvial aquifer.

WHEREAS, listed endangered and/or potential threatened species exist in the Muddy Springs/Muddy River area.

WHEREAS, testimony and evidence from the administrative hearing on the Las Vegas Valley Water District's applications indicates that their own expert witnesses are unable to make a suggestion to the State Engineer as to what part of the water budget could be captured without a great deal of uncertainty, and that the question cannot be resolved without stressing the system.¹⁹

¹⁴ See, testimony of Terry Katzer and David Donovan; Exhibit 54, p. 4-25, public administrative hearing before the State Engineer, July 16-24, 2001.

¹⁵ Taking into account for 4,000 afa of in-basin recharge and 1,000 afa of evapotranspiration.

¹⁶ See, testimony of Terry Katzer and David Donovan, public administrative hearing before the State Engineer, July 16-24, 2001.

¹⁷ See, testimony of Terry Katzer and David Donovan, public administrative hearing before the State Engineer, July 16-24, 2001.

¹⁸ Judgment and Decree, In the Matter of the Determination of the Relative Rights In and To the Waters of the Muddy River and Its Tributaries in Clark County, State of Nevada, March 12, 1920, Tenth Judicial District Court of the State of Nevada, In and For the County of Clark.

¹⁹ See, testimony of Terry Katzer and David Donovan, public administrative hearing before the State Engineer, June 16-24, 2001.

WHEREAS, testimony and evidence from the administrative hearing on the Las Vegas Valley Water District's applications indicates that the State Engineer's ability to determine if development of the carbonate-rock aquifer system will impact existing rights is dependent on how the water rights are brought "on-line" and monitored.²⁰

WHEREAS, testimony and evidence from the administrative hearing on the Las Vegas Valley Water District's applications indicates that little is known about the hydrologic connectivity between the groundwater basins, that virtually nothing is known about the mountain blocks, estimates of recharge to the area can vary by a factor of two, there is probably some connectivity between the water in the carbonate-rock aquifers and the alluvial groundwater basins,²¹ there is still little data available and not much has changed from the information known in 1984.

WHEREAS, the State Engineer has been provided several different models, which though based on little pumping data, all provide the State Engineer with different analyses, and which all indicate that the pumping of substantial amounts of carbonate-rock aquifer water will likely impact the sources of the Muddy River.

WHEREAS, the State Engineer has previously granted groundwater permits, which authorize use of underground water in the area underlain by the carbonate-rock aquifer system or directly from the carbonate-rock aquifer system in the following quantities:

Coyote Springs Valley (Basin 210) 16,300 acre-feet

Black Mountain (Basin 215) 10,216 acre-feet

Garnet Valley (Basin 216) 3,380 acre-feet

Hidden Valley (Basin 217) 2,200 acre-feet²²

Muddy River Springs 14,756 acre-feet

aka Upper Moapa Valley (Basin 219)

Lower Moapa Valley (Basin 220) 5,813 acre-feet

50,465 acre-feet

WHEREAS, of all the water rights issued from the carbonate-rock aquifer system, to date very few have actually been pumped.

WHEREAS, if 16,000 to 17,000 acre-feet is believed to by-pass the Muddy River Springs area, the water right permits already issued in Coyote Springs Valley alone equal the estimate of the amount of carbonate flow that by-passes the region and is not part of the flow discharged from the Muddy River Springs area.

WHEREAS, Nevada Revised Statute § 533.370(2)(b) provides that the State Engineer may postpone action on an application in areas where studies of water supplies are necessary.

WHEREAS, Nevada Revised Statute § 533.368 provides that if the State Engineer determines that a hydrological study, an environmental study or any other study is necessary before he makes a final determination on an application, and the applicant, a governmental agency or other person has not conducted such a study or the required study is not available, the State Engineer shall advise the applicant of the need for the study and the type of study required.

²⁰ Ibid.

²¹ Ibid.

²² This 2,200 acre-feet is combined with 2,200 acre-feet issued in Garnet Valley for a total of 2,200 afa between the two basins.

WHEREAS, Nevada Revised Statute § 533.368(4) provides that the State Engineer shall consult with the applicant and the governing body of the county or counties in which the point of diversion and place of use are located concerning the scope and progress of the study.

WHEREAS, the State Engineer believes it is prudent to work with a model, and the appropriate model will be determined in conjunction with the parties identified below who are responsible for participating in the study.

WHEREAS, the State Engineer does not believe it is prudent to issue any additional water rights to be pumped from the identified portions of the carbonate-rock aquifer until a significant portion of the water rights which have already been issued are pumped for a substantial period of time in order to determine if the pumping of those water rights will have any detrimental impacts on existing water rights or the environment.

NOW THEREFORE, the State Engineer orders:

1. All applications pending and any new filings for the appropriation of water from the carbonate-rock aquifer system in Coyote Springs Valley (Basin 210), Black Mountains Area (Basin 215), Garnet Valley (Basin 216), Hidden Valley (Basin 217), Muddy River Springs aka as Upper Moapa Valley (Basin 219), and Lower Moapa Valley (Basin 220) will be held in abeyance until further information is obtained by stressing the aquifer by those water right permits already issued to appropriate water from the carbonate-rock aquifer system.
2. While the studies proposed in 1985 were a beginning, those studies indicated that large-scale developments with sustained withdrawals of water from the carbonate-rock aquifers would result in water-level declines and depletion of stored water, but that isolated smaller groundwater developments or developments of limited duration may result in water-level declines and springflow reductions of manageable and acceptable magnitudes. However, very little additional information based on hard science has been produced since that time. Nevada Revised Statute § 533.368 provides the State Engineer with the authority to withhold action on pending applications and to advise the applicant of the need for additional study. The State Engineer finds that further hydrological study is needed before a final determination can be made on carbonate-rock aquifer system water right applications in the referenced basins.
3. The State Engineer, in conjunction with those identified below as applying for additional water rights and already having an interest in water rights permitted from the carbonate-rock aquifer system, or their successors in interest, will conduct a study to provide information on the effect of pumpage of those water rights which have already been issued from the carbonate-rock aquifer.

The entities that shall participate in the study must at a minimum include:

Las Vegas Valley Water District
Southern Nevada Water Authority
Coyote Springs Investment, LLC
Nevada Power Company
Moapa Valley Water District.

The study must cover a 5-year minimum period during which at least 50% of the water rights currently permitted in the Coyote Springs Valley groundwater basin are pumped for at least 2 consecutive years.

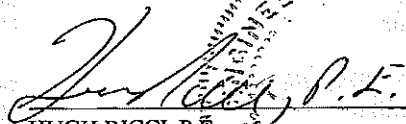
4. These referenced applicants or permittees shall bear the cost of the study, and a cash deposit divided pro rata among them will be required as set forth in NRS § 533.368(3) after a determination of the estimate of cost to complete the study.

5. The State Engineer will arrange meetings between the State Engineer and the Las Vegas Valley Water District, Southern Nevada Water Authority, Coyote Springs Investment, LLC, Nevada Power Company, and Moapa Valley Water District, or their successors, and the governing bodies of the counties in which there are proposed points of diversion and places of use under their pending applications concerning the scope of the study.

6. The State Engineer orders the Las Vegas Valley Water District, Southern Nevada Water Authority, Coyote Springs Investment, LLC, Nevada Power Company, Moapa Valley Water District, Dry Lake Water Company, LLC, Republic Environmental Technologies, Inc., Chemical Lime Co., Nevada Cogeneration Associates, or their successors, who presently hold water rights authorized for appropriation from the carbonate-rock aquifer, to provide the other parties to the study and the State Engineer with data on a quarterly basis as to the rate at which water was diverted under the specific water right permits issued, total acre-feet diverted per month, and monthly water level measurements

7. After the study period, the Las Vegas Valley Water District; Southern Nevada Water Authority; Coyote Springs Investment, LLC; Nevada Power Company; and Moapa Valley Water District are ordered to file with the State Engineer, within 180 days of the end of the fifth consecutive year, a report as to the information obtained and any impacts seen to the groundwater or surfacewater resources of the carbonate-rock aquifer or alluvial aquifer systems from the pumping of those rights presently permitted.

8. At the end of the study period, the Las Vegas Valley Water District/Southern Nevada Water Authority will update Exhibit 54 from the July 2001 hearings in order to show the State Engineer the effects, if any, of the water it requested for appropriation under Applications 54055 - 54059, inclusive, as they are filed. The State Engineer will then make a determination if he has sufficient information to proceed with ruling on those applications for which hearings have already been conducted, i.e., Las Vegas Valley Water District (Applications 54055 - 54059, inclusive) and Coyote Springs Investment, LLC (Applications 63272 - 63276, inclusive, and 63867 - 63876, inclusive), and other applications pending for the appropriation of water from the carbonate-rock aquifer system.


HUGH RICCI, P.E.
State Engineer

Dated at Carson City, Nevada,

this 8th day of March, 2002

CERTIFICATE OF SERVICE

I, the undersigned, declare under penalty of perjury, that I am an employee of the Nevada Division of Water Resources, that I am over the age of eighteen (18) years, and that I am not a party to, nor interested in, this action. On this date, I mailed a true and correct copy of Nevada Division of Water Resources' Order No. 1169, addressed to the following:

Las Vegas Valley Water District
Attn: Kay Brothers
1001 S. Valley View
Las Vegas, NV 89153
Cert. Mail #7000 0520 0023 8555 9034

Coyote Springs Investment, L.L.C.
7755 Spanish Springs Road
Sparks, NV 89436
Cert. Mail #7000 0520 0023 8555 9041

C.S. Inc.
Judy Kuban
1625 Wendy Way
Reno, NV 89509
Cert. Mail #7000 0520 0023 8555 9058

Dry Lake Water, LLC
2701 North Tenaya Way, Suite 200
Las Vegas, NV 89128
Cert. Mail #7000 0520 0023 8555 9065

Bonneville Nevada Corp.
257 East 200 South, Suite 800
Salt Lake City, UT 84111
Cert. Mail #7000 0520 0023 8555 9072

C.O. Myers, Exec. Dir.
Nevada Cogeneration Ass.
P.O. Box 81378
Bakersfield, CA 93380
Cert. Mail #7000 0520 0023 8555 9089

Nevada Power Co.
Attn: Craig York
P.O. Box 230
Las Vegas, NV 89151-0001
Cert. Mail #7000 0520 0023 8555 9096

Oxford Energy of Nevada, Inc.
3510 Unocal Place
Santa Rosa, CA 95403
Cert. Mail #7000 0520 0023 8555 9102

James W. Adams
7439 La Palma Ave., Suite 234
Buena Park, CA 90620
Cert. Mail #7000 0520 0023 8555 9119

Stallion Sand & Gravel, LLC
624 Casa del Norte
North Las Vegas, NV 89031
Cert. Mail #7000 0520 0023 8555 9126

Moapa Band of Paiute Indians
P.O. Box 340
Moapa, NV 89025
Cert. Mail #7000 0520 0023 8558 4562

Moapa Valley Water District
P.O. Box 257
Logandale, NV 89021
Cert. Mail #7000 0520 0023 8558 4579

Three Kids Enterprises
4055 S. Spencer St., Suite 106
Las Vegas, NV 89119
Cert. Mail #7000 0520 0023 8558 4586

Sandia Construction Inc.
c/o Cameron Adams
Box 1297
Susanville, CA 96103
Cert. Mail #7000 0520 0023 8558 4593

Nevada Cogeneration Associates
420 N. Nellis Blvd., #A3-148
Las Vegas, NV 89110
Cert. Mail #7000 0520 0023 8558 4609

N. Burgess
420 N. Nellis Blvd., #A3-117
Las Vegas, NV 89110
Cert. Mail #7000 0520 0023 8558 4616

North Valley Holdings
500 Damonte Ranch Parkway, Suite 1056
Reno, NV 89511
Cert. Mail #7000 0520 0023 8558 4623

Michael Buschelman
P.O. Box 51371
Sparks, NV 89435
Cert. Mail #7000 0520 0023 8558 4630

William Penn
CMS Generation Co.
330 Town Center Drive, Ste. 1100
Dearborn, MI 48126
Cert. Mail #7000 0520 0023 8558 4647

Thomas Shelton
CMS Generation Co.
2154 Hastings Ct.
Santa Rosa, CA 95495-8577
Cert. Mail #7000 0520 0023 8558 4654

Wyman Engineering Consultants
P.O. Box 60473
Boulder City, NV 89006-0473
Cert. Mail #7000 0520 0023 8558 4661

John E. Hiatt
8180 Placid St.
Las Vegas, NV 89123
Cert. Mail #7000 0520 0023 8558 4678

City of Caliente
Attn: George T. Rowe, Mayor
P.O. Box 158
Caliente, NV 89008
Cert. Mail #7000 0520 0023 8558 4685

County of Nye
P.O. Box 1767
Tonopah, NV 89049
Cert. Mail #7000 0520 0023 8558 4692

Ely Shoshone Tribe
16 Shoshone Circle
Ely, NV 89301
Cert. Mail #7000 0520 0023 8558 4708

Lincoln County, Board of Commissioners
P.O. Box 90
Pioche, NV 89043
Cert. Mail #7000 0520 0023 8558 4715

Clark County Commissioners
500 S. Grand Central Parkway
Las Vegas, NV 89106-4506
Cert. Mail #7000 0520 0023 8558 4807

Muddy Valley Irrigation District
P.O. Box 160
Logandale, NV 89021
Cert. Mail #7000 0520 0023 8558 4722

U.S. Bureau of Indian Affairs
Attn: Barry Welch
P.O. Box 10
Phoenix, Az. 85001
Cert. Mail #7000 0520 0023 8558 4739

U.S.D.I., B.L.M.
Attn: Ben F. Collins, District Manager
P.O. Box 26569
Las Vegas, NV 89126
Cert. Mail #7000 0520 0023 8558 4746

U.S. Fish and Wildlife Service
911 NE 11th Ave.
Portland, OR 97232-4184
Cert. Mail #7000 0520 0023 8558 4753

U.S. National Park Service
Dan McGlothlin
1201 Oak Ridge Drive, Suite 250
Fort Collins, CO 80525
Cert. Mail #7000 0520 0023 8558 4760

Republic Environmental Technologies, Inc.
770 E. Sahara Ave.
Las Vegas, NV 89104
Cert. Mail #7000 0520 0023 8558 4777

Chemical Lime Co.
P.O. Box 3609
North Las Vegas, NV 89036
Cert. Mail #7000 0520 0023 8558 4784

Nevada Cogeneration Associates
420 N. Nellis Blvd., A3-148 and 117
Las Vegas, NV 89110
Cert. Mail #7000 0520 0023 8558 4791

Richard Berley/Mark Slonim
Ziontz, Chestnut, Varnell, Berley and Slonim
2101 4th Ave., Suite 1230
Seattle, WA 98121

Robert Johnston
Kilpatrick, Johnston & Adler
412 North Division St.
Carson City, NV 89703

Ross de Lipkau
Marshall Hill Cassas & de Lipkau
P.O. Box 2790
Reno, NV 89505

Peter Fahmy
U.S. Dept. of Interior
755 Parfet St., Suite 151
Lakewood, CO 80215

Robert Marshall
Marshall Hill Cassas & deLipkau
P.O. Box 2790
Reno, NV 89505

Byron Mills
732 S. 6th St.
Las Vegas, NV 89101

Steve Palmer
Office of the Regional Solicitor
U.S. Dept. of Interior
2800 Cottage Way, Room B-2753
Sacramento, CA 95825-1890

Karen Peterson
Allison, MacKenzie, Hartman, et. al.
P.O. Box 646
Carson City, NV 89702

Peggy Twedt
Frank Flaherty
Dyer, Lawrence, Cooney & Penrose
2805 N. Mountain St.
Carson City, NV 89703

Harvey Whittemore
Carl Savely
Lionel, Sawyer & Collins
50 West Liberty St. Suite 1100
Reno, NV 89501

Don Winter
Agent C.S. Inc.
P.O. Box 35136
Las Vegas, NV 89133

Charles Cave
2325 W. Charleston Blvd.
Las Vegas, NV 89102

Dale Ferguson
Woodburn & Wedge
6100 Neil Road, Ste. 500
Reno, NV 89511

Mark Stock
Global Hydrologic Services, Inc.
561 Keystone Ave. #200
Reno, NV 89503

Linda Bowman
540 Hammil Lane
Reno, NV 89511

George Benesch
P.O. Box 3498
Reno, NV 89505

Dated this 8 day of March, 2002.

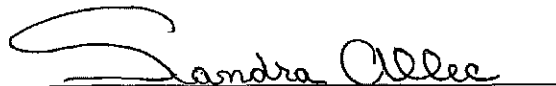

Sandra Allee

Exhibit 2

AMENDED STIPULATION FOR WITHDRAWAL OF PROTESTS

This Amended Stipulation is made and entered into between the Lincoln County Water District and Vidler Water Company, Inc. ("LCWD&VWC") and the United States Department of the Interior, Fish and Wildlife Service (FWS). Collectively, LCWD&VWC and the FWS are referred to as the "Parties".

RECITALS

- A. On February 14, 2005, LCWD&VWC filed Applications 72278, 72219, 72220, and 72221, for a combined maximum duty of approximately 17,375.28 acre-feet per year (afy), with the Nevada State Engineer's Office. The above listed applications shall hereinafter be referred as the "Applications". LCWD&VWC initially intend to pump up to 5,000 afy of groundwater from the Kane Springs Valley Hydrographic Basin (hereinafter referred to as "Kane Springs Valley") pursuant to these Applications, for municipal and domestic uses associated with the Coyote Springs Project in Lincoln County.
- B. The FWS filed timely protests to the granting of water rights under the Applications pursuant to the FWS' responsibilities under the Endangered Species Act and administration of the National Wildlife Refuge System. FWS holds a Nevada State water right certificate for a flow rate of not less than 3.5 cfs as measured at the Warm Springs West flume (Permit No. 56668; Certificate No. 15097 issued subject to the terms of Permit No. 56668) for the maintenance of habitat of the Moapa dace and other wildlife purposes ("FWS Water Right"). The Moapa dace (*Moapa coviacea*) is an endemic fish that inhabits the upper Muddy River and tributary thermal spring systems within the Muddy River Springs/Warm Springs Area in Clark County, Nevada. The Moapa dace was federally listed as endangered on March 11, 1967 (32 FR4001). FWS manages the Moapa Valley National Wildlife Refuge established in 1979 as part of the National Wildlife Refuge System.
- C. LCWD&VWC assert that the withdrawal of up to 5,000 afy of groundwater from the proposed wells in Kane Springs Valley will not have an unreasonable adverse affect on endangered species in the Coyote Springs Valley or the Muddy River Springs/Warm Springs Area. LCWD&VWC propose to request the State Engineer hold in abeyance the remaining amount requested in the Applications, until a determination is made from the monitoring of the initial groundwater withdrawal that there are no unreasonable adverse affects due to LCWD&VWC's groundwater pumping.
- D. The FWS together with the United States National Park Service sent a letter to the Nevada State Engineer, dated February 6, 2006, recommending that the State Engineer amend his Order 1169 to include Kane Springs Valley and these Applications. This Stipulation is entered into in part to address the FWS's concern expressed in the February 6, 2006 letter. As such, the FWS will withdraw its request to the State Engineer by so stating on the record at the beginning of the hearing when the Stipulation is presented to the State Engineer as provided in paragraph 6 of the Stipulation.

- E. The FWS asserts that the proposed groundwater withdrawals from Kane Springs Valley pose a risk of adversely impacting senior federal water rights and water-related resources, as described above, and are desirous of working in a cooperative manner with LCWD&VWC to protect these resources.
- F. There are a number of existing monitoring programs required by the State Engineer for existing rights and pending applications within Coyote Spring Valley Hydrographic Basin. The State Engineer has determined in Order No. 1169 (Order) that further hydrological study is needed before a final determination can be made on pending applications and new filings to appropriate water from the carbonate-rock aquifer system in Coyote Spring Valley (Basin 210), Black Mountains Area (Basin 215), Garnet Valley (Basin 216), Hidden Valley (Basin 217), Muddy River Springs (Basin 219) and Lower Moapa Valley (Basin 220) in Lincoln and Clark Counties, Nevada. While the Order does not currently include Kane Springs Valley or the Applications, the FWS and LCWD&VWC agree there is a need to develop data relating to a better understanding and analysis to assist the State Engineer in studying the impacts from the pumping of groundwater in the regional aquifer system.
- G. The Parties acknowledge that Nevada Water Law provides pursuant to NRS 534.110(4) that "It is a condition of each appropriation of ground water acquired under this chapter [534] that the right of the appropriator relates to a specific quantity of water and that the right must allow for a reasonable lowering of the static water level at the appropriator's point of diversion." Further, pursuant to NRS 534.110(5), Nevada Water Law "does not prevent the granting of permits to applicants later in time on the ground that the diversions under the proposed later appropriations may cause the water level to be lowered at the point of diversion of a prior appropriator, so long as the rights of holders of existing appropriations can be satisfied under such express conditions." It is the intent of the Parties that this Stipulation provides the initial "express conditions" to allow the development of the LCWD&VWC Applications to proceed, however, such future conditions may be different based on implementation of the monitoring, management and mitigation plan specified in Exhibit A, attached to this Stipulation and made a part hereof.
- H. The State Engineer has set an administrative hearing on the protests of the FWS and other protestants commencing April 4, 2006.
- I. The Parties acknowledge that White Pine County, Wayne, Ruby and Bevan Lister, and the United States National Park Service have lodged protests to the Applications, but that those entities are not Parties to or in any way bound or prejudiced by this Stipulation. Further, these protestants may enter into stipulations with LCWD&VWC concerning the LCWD&VWC Applications. Such stipulations shall not require the participation of the FWS nor modify in anyway the intent or content of this Stipulation, nor shall the FWS be bound or prejudiced by such stipulations.

- J. The Parties agree that the preferred conceptual approach for protecting senior federal water rights from injury and federal water-related resources from unreasonable adverse impacts from ground water pumping is through the use of monitoring, management and mitigation of groundwater pumping. The common goal of the Parties is to manage the development of the regional carbonate-rock aquifer and overlying basin-fill aquifer systems as a water resource without causing any injury to senior federal water rights and/or unreasonable adverse impacts to federal water-related resources. Groundwater and the effects of pumping need to be properly monitored and managed to avoid adverse impacts to the water rights and water resources of the FWS. To accomplish this goal, there is a need to obtain accurate and reliable information of the aquifer's response to pumping stresses and the impact of that pumping on water rights and resources of interest. This is to be accomplished by implementing the monitoring, management and mitigation plan as set forth in Exhibit A to this Stipulation. The Parties have determined that it is in their best interests to cooperate in the collection of additional hydrologic and hydrogeologic information as set forth in Exhibit A to this Stipulation.
- K. The Parties desire to resolve the issues raised by the protests according to the terms and conditions contained herein.
- L. On April 10, 2006, LCWD & VWC filed application nos. 74147, 74148, 74149, and 74150 to appropriate underground water in Kane Springs Valley Hydrographic Basin (subsequent applications). Each of these subsequent filings are identical in quantity (in cfs and acre-feet per year) and point of diversion to the water right applications which are the subject of the Stipulation (application nos. 72218, 72219, 72220, and 72221). LCWD & VWD filing of the subsequent applications was precautionary in nature, and was made to protect Lincoln County Water District and Vidler Water Company's standing in the Kane Springs Hydrographic Basin in the event that applications 72218, 72219, 72220, or 72221 are denied by the State Engineer on a technical or administrative ground. The filing of the subsequent applications raises the same concerns by the FWS as stated in Recital E above. In lieu of filing protests to the subsequent applications, the parties agree that the subsequent applications shall be subject to the terms and conditions of this Amended Stipulation and do not in any way supplement applications 72218, 72219, 72220, and 72221, which are currently under consideration by the State Engineer.

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein, the Parties do agree as follows:

1. The FWS hereby expressly agrees to withdraw its protests to the Applications and agrees that the Nevada State Engineer may rule on the Applications based upon the terms and conditions set forth herein. The FWS agrees not to file protests to the subsequent applications based on the inclusion of the subsequent applications in this Amended Stipulation (hereinafter referred to as "Stipulation") and that the terms and condition of this Stipulation apply equally to the subsequent applications. Hereinafter in this Stipulation, the term "Applications" shall also refer to the subsequent applications. It is expressly understood that this Stipulation is binding only upon the Parties hereto and their successors, transferees and assigns, and shall not bind or seek to bind or prejudice

any other Parties or protestants, including the United States as trustee on behalf of the any Indian tribe. The execution and filing of this Stipulation with the State Engineer shall have the effect of withdrawing the FWS protests as provided for in Nevada Administrative Code § 533.150.

2. The Parties agree to implement the Monitoring, Management and Mitigation plan, attached hereto "Exhibit A", which is expressly incorporated into this Stipulation as if set forth in full herein upon the State Engineer's granting of the Applications, in total or in part, and upon the terms and conditions contained in Exhibit A.
3. This Stipulation does not waive any authorities of the FWS or the United States, including any other agency or bureau not specified in this Stipulation, nor relieves LCWD&VWC, or any party acting in conjunction with or through LCWD&VWC from complying with any federal laws, including, but not limited to, the National Environmental Policy Act, the Endangered Species Act, the Federal Land Policy and Management Act, and any and all rules and regulations thereunder. It is the expressed intention of the Parties that by entering into this Stipulation, the FWS and the United States are waiving no legal rights of any kind, except for the withdrawal of its protests as provided in Paragraph 1 of this Stipulation. Likewise, LCWD&VWC, or any party acting in conjunction with or through LCWD&VWC, by entering into this Stipulation, are not waiving any legal rights of any kind, except as expressly provided in this Stipulation and its Exhibit A.
4. Further, except as expressly stated in this Stipulation or its Exhibit A, this Stipulation does not affect any legal or administrative process or proceeding concerning rights-of-way or any action that may be necessary to further the development and/or use of the water sought under the Applications.
5. The Parties expressly acknowledge that the Nevada State Engineer has, pursuant to both statutory and case law, broad authority to administer groundwater resources in the State of Nevada and, furthermore, that nothing contained in this Stipulation shall be construed as waiving or in any manner diminishing such authority.
6. The Parties agree that a copy of this Stipulation shall be submitted to the Nevada State Engineer prior to the commencement of the administrative proceedings scheduled to begin on April 4, 2006. The Parties shall request on the record at the beginning of the scheduled proceeding, that the State Engineer include Exhibit A of the Stipulation as part of the permit terms and conditions, in the event that he grants Applications 72278, 72219, 72220, and 72221, in total or in part. The FWS, at its option, may attend the hearing, but will present no issues or statements unless necessary to explain or defend this Stipulation or Exhibit A.
7. Notices. If notice is required to be sent by the Parties, the addresses are as follows:

If to FWS:

Supervisor
Nevada Field Office
Fish and Wildlife Service
1340 Financial Blvd., #234
Reno, NV 89502

If to LCWD&VWC:
Chairman
Lincoln County Water District
P.O. Box 685
Pioche, NV 89043

And:
Dorothy Timian-Palmer
Vidler Water Company, Inc.
704 W. Nye Lane, Suite 201
Carson City, NV 89703

8. LCWD&VWC may transfer or assign its interest in the water rights here involved. Any and all transferees and assignees shall be bound by the terms and conditions of this Stipulation. As a condition to any such transfer or assignment, the transferee and/or assignee shall execute a stipulation expressly stating it is bound to all of the terms and conditions of this Stipulation.
9. This Stipulation shall be governed in accordance with the laws of the State of Nevada to the extent not inconsistent with federal law.
10. Copies of all correspondence between and data gathered by the Parties pertinent to the terms of Exhibit A shall be submitted to the Nevada State Engineer. It is the intentions of the Parties hereto that the Nevada State Engineer shall be kept informed of all activities in the same fashion as are the Parties hereto.
11. By entering into this Stipulation, the FWS does not become a party to any proceeding other than the protest proceeding referenced above or waive its immunity from suit or consent to or acknowledge the jurisdiction of any court or tribunal. Nothing in the Stipulation shall affect any federal reserved water rights of the FWS or the United States on behalf of any Indian Tribe and the FWS by entering into this Stipulation do not waive or prejudice any such rights. The FWS reserves all legal rights, of any kind, it possesses pursuant to or derived from Executive Orders, acts of Congress, judicial decisions, or regulations promulgated pursuant thereto. Neither party waives its rights to seek relief in any appropriate forum of its choice not expressly prohibited by this Stipulation.
12. Any commitment of funding by the FWS or Lincoln County Water District in this Stipulation or otherwise is subject to appropriations by Congress or the governing body of the Lincoln County Water District as appropriate.

13. This Stipulation may be amended by mutual agreement of the Parties.
14. This Stipulation sets forth the entire agreement of the Parties and supercedes all prior discussions, negotiations, understandings or agreements. No alteration or variation of this Stipulation shall be valid or binding unless contained in an amendment in accordance with paragraph 13.
15. This Stipulation is entered into for the purpose of resolving a disputed claim. The Parties agree that the Stipulation shall not be offered as evidence or treated as an admission regarding any matter herein and may not be used in proceedings on any other application or protest whatsoever, except that the Stipulation may be used in any future proceeding to interpret and/or enforce the terms of this Stipulation. Further, the Parties agree that neither the Stipulation nor any of its terms shall be used to establish precedent with respect to any other application or protest in any water rights adjudication or water rights permitting proceeding before the Nevada State Engineer or any other proceeding.
16. The terms and conditions of this Stipulation shall be binding upon and inure to the benefit of the Parties hereto and their respective, successors, transferees and assigns.
17. This Stipulation will become effective as between the Parties upon all Parties signing this Stipulation. The Parties may execute this Stipulation in two or more counterparts, which shall, in the aggregate, be signed by all Parties; each counterpart shall be deemed an original as against any Party who has signed it.
18. Other entities may become Parties to this Stipulation by mutual assent of the Parties.
19. Nothing contained herein shall limit the right of LCWD & VWC, or their successors, transferees, or assigns to assign, pledge, or encumber as security the Applications that are the subject of this Stipulation.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement on the dates written below.

UNITED STATES DEPARTMENT OF THE INTERIOR

Date: 8/1/2006

Fish and Wildlife Service

By Steve Thompson

Title: CNO MANAGER

Date: 7-17-06
[Signature]

LINCOLN COUNTY WATER DISTRICT

Page 7 of 15

By Randa Hoenbeck
Title: Chairwoman

Date: 7-19-06

VIDLER WATER COMPANY, INC.

By Debra A. Jurek
Title: Chief Operating Officer

ATTEST:

Debra A. Jurek
Lead Legal Counsel

EXHIBIT A

for

Amended Stipulation between LCWD&VWC and the United States Fish and Wildlife Service

**MONITORING, MANAGEMENT AND MITIGATION PLAN GROUNDWATER
DEVELOPMENT IN KANE SPRINGS VALLEY**

The purpose of this plan is to describe the agreements of Lincoln County Water District and Vidler Water Company, Inc. (LCWD&VWC) and the United States Fish and Wildlife Service (FWS) regarding the monitoring, management, and mitigation of potential impacts due to development of ground-water resources in the Kane Springs Valley area. This plan applies to proposed ground-water development in Kane Springs Valley that consists of the use of water under State of Nevada water-rights applications numbered 72218, 72219, 72220 and 72221 and the subsequent applications 74147, 74148, 74149, and 74150, filed by LCWD&VWC.

The Plan describes the LCWD&VWC and FWS (hereinafter referred to as "the parties") obligations regarding the development, monitoring, management, and mitigation related to the above numbered applications in Kane Springs Valley Hydrographic Basin for use that water in Coyote Spring Valley Hydrographic Basin.

This plan consists of four principle components, as follows:

1. *Monitoring Requirements*, related to production wells, monitoring wells, elevation control, and springflow, water quality, quality of data, and reporting;
2. *Management Requirements*, related to the creation and role of a Technical Review Team (hereinafter referred to as "the TRT"), the development and use of a numerical ground-water flow model, the establishment of action criteria, and the details of the decision-making process;
3. *Mitigation Requirements*; and
4. *Modification of the Plan*.

The common goal of the parties is to manage the development of the LCWD&VWC Water Rights in their entirety from Kane Springs Valley Hydrographic Basin, without resulting in any losses to senior federal water rights or unreasonable adverse impacts to federal water resources. The parties will collaborate on technical data collection and analysis and will rely on the best scientific information available in making decisions required by the Plan.

1. Monitoring Requirements

A. *Production Wells*

- LCWD&VWC will record discharge and water levels in their production wells in Kane Springs Valley on a continuous basis as is feasible.

B. *Monitoring Wells*

LCWD&VWC, as determined by the parties to this agreement, in consultation with the Nevada State

Engineer, shall locate and construct two monitoring wells down gradient from the Kane Springs Valley ground-water production well (KMW-1). The location of the first proposed monitoring well (CSIMW-1) is to be an equal distance between the existing Southern Nevada Water Authority Monitoring Well Four (CSVM-4) and the Coyote Spring Investment monitoring well CE-VF-2. Further, CSIMW-1 will be located on the north (hydraulically upgradient) side of the interpreted southwestern extension of the Kane Springs Wash fault zone on Coyote Springs Investment property along the existing abandoned Highway 93. The second proposed monitoring well (CSIMW-2) is to be located on the south (hydraulically downgradient) side of the interpreted southwestern extension of the Kane Springs Wash fault zone on Coyote Springs Investment property along the existing abandoned Highway 93. Specifically, the second well would be sited such that the distance between the monitoring well CSIMW-1 and the aforementioned fault zone is approximately equal to the distance between the fault zone and CSIMW-2. See Attachments "A-1", "A-2", "A-3" and "A-4" to this Exhibit A. FWS shall work with LCWD&VWC in good faith to ensure that the well is located and constructed in a cost-effective manner, to enable the monitoring of the potential southward progression of groundwater level declines resulting from proposed ground-water production in Kane Springs Valley.

- All monitoring wells used as part of this plan shall be installed and water levels recorded on a continuous basis as is feasible, beginning as soon as possible after the State Engineer decision relative to the Kane Springs Valley Applications.
- The initial groundwater level would be established at the time that the pumping wells in Kane Spring Valley were ready to go on-line.
- The term "as is feasible" shall relate to mechanical failures and the issues associated with the remoteness of the locations, or other events outside the control of the parties that do not permit data collection.
- The locations and monitoring frequency of the monitoring-well network will be reviewed by the TRT on an annual basis beginning in 2007, and may be reduced or expanded in scope upon its recommendation.

C. Elevation Control

- LCWD&VWC will conduct a detailed elevation survey of all their wells used for monitoring as part of this plan. LCWD&VWC will cooperate in any regional plan organized by the Nevada State Engineer to determine elevation above sea level of all major spring orifices and monitoring and production wells in the Lower Colorado Flow System region. LCWD/VWC will match the Southern Nevada Water Authority's current datum relating to monitoring and production well elevations.

D. Water Quality

- LCWD&VWC will collect water quality samples and have them analyzed for major ions, trace elements, and isotopes at all production and monitor wells used as part of this plan (as specified in Sections 1.A and 1.B.) commencing July 1, 2007.
- Thereafter, LCWD&VWC will collect and analyze water-quality samples for major ions, trace

elements, and isotopes at all production and monitoring wells used as part of this plan every five years thereafter.

- Samples will be collected, analyzed and reported according to standard methods.
- Frequency, sampling location, and water quality parameters will be reviewed by the TRT on an annual basis beginning in 2007, and may be reduced or expanded in scope upon its recommendation.

E. *Reporting*

- All data collected under or as described in this plan, shall be fully and cooperatively shared among the parties.
- Water level and production data shall be provided to the FWS within 60 days of its collection by LCWD&VWC. LCWD&VWC will use its best efforts to provide data to the FWS within 30 days of its submission to LCWD&VWC, or in the case of water quality data, within 90 days of receipt of laboratory results.
- LCWD&VWC will report the results of all monitoring and sampling under this plan in an annual monitoring report

2. Management Requirements

A. Action Criteria

The Parties recognize that maintenance of minimum in-stream flows in the Warm Springs area is essential for the protection and recovery of the Moapa dace. Further, the parties recognize that existing data is insufficient to determine if the groundwater development in Kane Springs Valley Hydrographic Basin, that is the subject of the Plan, affects the in-stream flows in the Muddy River Springs/Warm Springs Area, and if so, to what extent. Thus, the parties agree as follows:

1. For purposes of this paragraph A., all "Average Flow Levels" specified herein shall be determined by flow measurements at the Warm Springs West flume. Average Flow Levels will be determined to have reached a particular level within a range specified in paragraphs B(2) through (7) ("Trigger Range"): (1) if the daily average flow for each of 45 consecutive days decreases to an amount within the Trigger Range, or if the 90 day average flow over any 90 consecutive day period decreases to an amount within the Trigger Range; or (2) if the daily average flow for each of 90 consecutive days increases to an amount within the Trigger Range, or if the 135-day average flow over any 135 consecutive day period increases to an amount within the Trigger Range. Any adjustment in the rating curve for the Warm Springs West flume shall result in a pro-rata adjustment of the Trigger Ranges.

2. If the Average Flow Level decreases to an amount within the Trigger Range of 3.2 cfs or less, the Parties agree to meet as soon as practicably possible to discuss and interpret all available data and plan for mitigation measures in the event flows continue to decline; and

3. If the Average Flow Level is within the Trigger Range of 3.15 cfs or less but greater than 3.0 cfs, LCWD&VWC agree to reduce pumping from all wells in Kane Springs Valley by 50% or to a pumping level no greater than 2,500 afy, whichever results in the lesser amount of pumping, until the Average Flow Level exceeds 3.15 cfs.

4. If the Average Flow Level is within the Trigger Range of 3.0 cfs or less, LCWD&VWC agree to cease pumping from all wells in Kane Springs Valley until the Average Flow Level exceeds 3.0 cfs. However, if LCWD&VWC, together with Coyote Springs Investment, LLC ("CSI"), effectuate a reduction in the quantity of water CSI would have otherwise been entitled to pump in a given year from wells within the Coyote Spring Valley, then LCWD&VWC shall have the right to pump a like quantity of water from wells within Kane Springs Valley in that year.

B. Technical Review Team

1. Upon execution of this Stipulation, the Parties shall establish a Technical Review Team ("TRT") whose members shall include two representatives ("TRT Representatives") each from LCWD&VWC and the FWS, including at least one with substantial formal training and experience in hydrogeology ("Technical Representative"). Except as otherwise provided herein, the two TRT Representatives shall together have one vote on TRT matters. By consensus, the TRT Representatives may offer voting or non-voting TRT membership to others who provide regional monitoring records and analyses to the TRT.

2. The objectives of the TRT shall be to review existing data, make recommendations concerning the monitoring efforts required by this Plan, and determine whether other criteria, such as water levels in monitoring wells, are a better indicator of potential effects of the pumping wells on the springs in the Muddy River Springs/Warm Springs Area. Either party may advance any recommendation for consideration by the other party to modify the action criteria. However, no change in the action criteria shall occur within the first five (5) years following the effective date of the Plan. After this five year period, and if the TRT reaches a consensus on changes to the action criteria, such criteria may be changed.

3. If the TRT Representatives are unable to reach consensus on the action criteria, the Parties shall refer the matter to a qualified panel of third party reviewers ("Panel") consisting of three scientists unaffiliated with any Party and having substantial formal training and experience in hydrogeology. If the Parties cannot agree by consensus on the make-up of the Panel, one member of the Panel shall be designated by each of the following from its own ranks: U.S. Geologic Survey, Nevada State Engineer (if the Nevada State Engineer declines to participate, then the Desert Research Institute shall be substituted), and a private firm with the requisite expertise designated by a majority of the Parties ("Appointing Entities"), provided that the Parties by consensus may designate different similarly qualified Appointing Entities. If any Appointing Entity for any reason is unable or refuses to designate a member of the Panel, the Parties by majority vote shall designate a qualified replacement Appointing Entity. The purpose of the referral to the Panel will be to obtain peer review of the then-current action criteria, the data upon which it is based, all previously submitted data and reports, and any other relevant and available data and analytical materials. The Panel will be asked to make its recommendation

based on the foregoing information concerning the appropriate content of the action criteria. All Parties shall have a fair and reasonable opportunity to present factual and analytical submissions in person and/or in writing to the Panel. The Parties contemplate that a determination of the Panel on the action criteria will constitute the best available scientific information concerning the impacts on Muddy River Springs/Warm Springs Area and Muddy River flows resulting from regional groundwater pumping, and the appropriateness of any proposed pumping restriction adjustments. The cost of the Panel shall be borne equally by the Parties.

3. Mitigation Requirements

- LCWD&VWC will mitigate unreasonable adverse impacts either as agreed upon by the parties or after the Nevada State Engineer determines whether there are unreasonable adverse impacts due to LCWD&VWC pumping. LCWD&VWC will take the necessary steps to ensure that mitigation actions are feasible.
- As part of their commitment to the recovery of the Moapa dace, LCWD&VWC shall commit \$50,000, annually for a period of five (5) years following the granting of the Applications, in total or in part, for the restoration of Moapa dace habitat outside the boundaries of the Moapa National Wildlife Refuge. Such restoration shall be conducted as agreed to by the FWS. In the event that the Applications as granted by the State Engineer total less than 2,500 afy, the parties agree to meet and renegotiate the annual funding amount to be consistent with the lesser quantity of water granted and the commitment by LCWD&VWC to participate in restoration activities of the Moapa dace. FWS acknowledges that Coyote Springs Investment LLC, a Nevada limited liability company (CSI), has dedicated certain quantities of water pursuant to a Memorandum of Agreement by and between the Southern Nevada Water Authority, the United States Fish and Wildlife Service, CSI, the Moapa Band of Paiutes, and the Moapa Valley Water District. FWS further acknowledges that CSI is the intended beneficiary of the water to be developed pursuant to the Applications. Thus, in the event that pumping of groundwater pursuant to the Applications is restricted pursuant to Section 2. A. of this Exhibit A to the Stipulation, FWS agrees to use any quantities of water dedicated by CSI pursuant to the MOA for the survival and recovery of the Moapa dace as directed in the MOA.

4. Modification of the Plan

- LCWD&VWC and the FWS may modify this plan by mutual agreement. The parties also acknowledge that the State Engineer has the authority to modify this plan. In addition, LCWD&VWC and the FWS may individually or jointly petition the State Engineer to modify this plan in the event that mutual agreement cannot be reached. Any such petition shall only be filed after 90 days written notice to the remaining party. Either LCWD&VWC or the FWS may submit written comments to the State Engineer regarding the merits of any such petition for modification.

Exhibit 3

**IN THE OFFICE OF THE STATE ENGINEER
OF THE STATE OF NEVADA**

IN THE MATTER OF APPLICATIONS)
72218, 72219, 72220 AND 72221 FILED TO)
APPROPRIATE THE UNDERGROUND)
WATERS OF THE KANE SPRINGS)
VALLEY HYDROGRAPHIC BASIN (206))
LINCOLN COUNTY, NEVADA.)

RULING

#5712

GENERAL

I.

Application 72218 was filed on February 14, 2005, by Lincoln County Water District and Vidler Water Company, Inc., to appropriate 6.0 cubic feet per second (cfs) of the underground water of the Kane Springs Valley Hydrographic Basin for municipal purposes within Coyote Spring Valley Hydrographic Basin more specifically described as portions of T.8S., R.62E., T.8S., R.63E., T.8S., R.64E., T.9S., R.61E., T.9S., R.62E., T.9S., R.63E., T.9S., R.64E., T.10S., R.61E., all of T.10S., R.62E., portions of T.10S., R.63E., T.10S., R.64E., T.11S., R.61E., all of T.11S., R.62E., portions of T.11S., R.63E., T.11S., R.64E., T.12S., R.61E., all of T.12S., R.62E., all of T.12S., R.63E., portions of T.12S., R.64E., T.12.5S., R.61E., T.12.5S., R.62E., T.13S., R.61E., all of T.13S., R.62E., portions of T.13S., R.63E., T.13S., R.64E., T.13.5S., R.63E., T.14S., R.61E., all of T.14S., R.62E., portions of T.14S., R.63E., T.15S., R.61E., T.15S., R.62E., T.15S., R.63E., T.16S., R.62E., M.D.B. & M. The proposed point of diversion is described as being located within the SW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 25, T.8S., R.65E., M.D.B. & M.¹

II.

Application 72219 was filed on February 14, 2005, by Lincoln County Water District and Vidler Water Company, Inc., to appropriate 6.0 cfs of the underground water of the Kane Springs Valley Hydrographic Basin for municipal purposes within Coyote Spring Valley Hydrographic Basin more specifically as described above. The proposed point of diversion is described as being located within the SE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 31, T.9S., R.65E., M.D.B. & M.²

¹ File No. 72218, official records of the Office of the State Engineer. Exhibit No. 2, public administrative hearing before the State Engineer, April 4-6, 2006. Hereinafter the exhibits and transcript will be referred to solely by exhibit number or transcript page.

² Exhibit No. 3.

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III.

Application 72220 was filed on February 14, 2005, by Lincoln County Water District and Vidler Water Company, Inc., to appropriate 6.0 cfs of the underground water of the Kane Springs Valley Hydrographic Basin for municipal purposes within Coyote Spring Valley Hydrographic Basin more specifically as described above. The proposed point of diversion is described as being located within the SE¼ SW¼ of Section 6, T.11S., R.64E., M.D.B.&M.³

IV.

Application 72221 was filed on February 14, 2005, by Lincoln County Water District and Vidler Water Company, Inc., to appropriate 6.0 cfs of the underground water of the Kane Springs Valley Hydrographic Basin for municipal purposes within Coyote Spring Valley Hydrographic Basin more specifically as described above. The proposed point of diversion is described as being located in the SE¼ SW¼ of Section 11, T.9S., R.65E., M.D.B.&M.⁴

V.

Applications 72218 and 72219 were timely protested by White Pine County; however, said protests were withdrawn prior to the administrative hearing.⁵

VI.

Applications 72218 and 72219 were timely protested by Wayne Lister, Ruby Lister and Bevan Lister on the grounds that:

1. Lincoln County Water District has no written adopted plan for the use of the water applied for under this permit. There is no city or town within the area of this permit.
2. We have long argued that moving water from one basin to another is detrimental to the originating basin.
3. Lincoln County Water District is supposed to be a local government entity protecting and planning for the benefit of the citizens of Lincoln County but in teaming up with Vidler they become merely speculative with the sole objective to make a profit.⁶

VII.

Applications 72218, 72219, 72220 and 72221 were timely protested by the United States Department of Interior, National Park Service ("NPS") on the grounds that:

³ Exhibit No. 4.

⁴ Exhibit No. 5.

⁵ Exhibit No. 6.

⁶ Exhibit No. 7.

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1. There is no water available for appropriation because committed water resources exceed ground-water recharge.
2. The approval and development of the appropriation proposed by this application will impair the water rights of the United States, because:
 - A. The appropriation, in combination with other appropriations and withdrawals in Coyote Spring Valley will further reduce the discharge of the Muddy River. The United States' senior water right and other existing rights to the Muddy River would be impaired, if the appropriation is approved and developed.
 - B. The proposed appropriation, in combination with existing appropriations and pending applications in the White River ground-water flow system, if approved and developed, would reduce the discharge of Lake Mead NRA [National Recreation Area] springs, because of the large potential withdrawal rate. The drawdown caused by such large withdrawals would extend to capture ground water that naturally discharges through the springs.
 - C. The effects of the appropriation proposed by this application, when combined with other existing and proposed appropriations, could impair the senior water rights of the Lake Mead NRA more quickly and/or to a degree greater than the withdrawal proposed under this application alone.
3. The public interest would not be served, by granting a permit to this application, because:
 - A. The public interest would not be served by granting this application, because the water and water-related resources in the nationally important Lake Mead NRA would be diminished or impaired, as a result of the appropriation proposed by this application.
 - B. The land which the applicant proposes to withdraw the water is not owned by the applicant. [This protest claim only goes to Applications 72218 and 72219.]⁷

VIII.

Applications 72220 and 72221 were protested by the United States Department of Interior, Fish and Wildlife Service ("FWS") on the grounds that:

The proposed groundwater development threatens the biological and water resources under the jurisdiction of the US Fish and Wildlife Service in the White River Groundwater Flow System. Kane Springs Valley is located upgradient of Coyote Spring Valley and the Muddy River Area. Pumping of groundwater from the basin could reduce the groundwater influx to springs at Moapa Valley National Wildlife Refuge in the Muddy River Area. The combined perennial yield for Coyote Spring valley [sic] and Kane Springs Valley may be on the order of 2,600 acre-feet/yr as estimated in ground-water Resources Reconnaissance Series Report 25. Although there are no permits in Kane Springs Valley, there are at least 200,000

⁷ Exhibit No. 8.

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acre-feet/yr of permitted and pending applications in Coyote Spring Valley, directly downgradient. An additional withdrawal would only add to the current exceedance of the perennial yield for the combined basins. Such a withdrawal of groundwater in excess of the perennial yield could result in reduced groundwater flow from Coyote Spring Valley to the Muddy River Area, or result in a reversed gradient causing groundwater outflow from Coyote Spring Valley to Kane Springs Valley. Senior water rights held by the Fish and Wildlife Service in the Moapa Valley National Wildlife refuge [sic] could be adversely impacted. Such an impact to the water rights and resources of the Moapa Valley National Wildlife refuge [sic] and environs could adversely impact threatened and endangered species including Moapa dace and Southwestern Willow Flycatcher; which depend on these water resources for survival. Water-dependent resources in Lower Meadow Valley Wash may be threatened by the proposed development too. The combined volume from all of these pending applications and permitted water rights exceeds all current estimates of the available water for appropriation in the White River Groundwater Flow System. Lacking more information to demonstrate that water is available for appropriation without adversely impacting existing water rights and water-related resources, these applications should be denied.⁸

IX.

By letter dated February 6, 2006, the NPS and FWS requested the State Engineer amend State Engineer's Order No. 1169 to include the Kane Springs Valley Hydrographic Basin within the provisions of the Order and included a request to hold these applications in abeyance until the pumping ordered in Coyote Spring Valley was completed and analyzed.⁹ The reasoning behind the request is that these agencies believe Kane Springs Valley and Coyote Spring Valley, while administratively classified as separate hydrographic basins, are actually a single distinct hydrologic drainage basin and should be managed as such. At the public administrative hearing on these applications, the Applicant and Protestant FWS presented a stipulation to resolve the FWS's protests.¹⁰ The resolution was also in lieu of statements made on behalf of the FWS in the February 6, 2006, letter that requested Kane Springs Valley be included in State Engineer's Order No. 1169.¹¹ Pursuant to the Stipulation, the FWS withdrew its protests and the parties requested that Exhibit A to the Stipulation be included as part of the terms and conditions of any applications that are granted. However, the NPS's request to include Kane Springs Valley Hydrographic Basin within the provisions of Order No. 1169 remains to be resolved.

⁸ Exhibit No. 9.

⁹ Exhibit No. 10.

¹⁰ Exhibit No. 116.

¹¹ Transcript, p. 12.

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X.

After all parties of interest were duly noticed by certified mail, an administrative hearing was held with regard to the protested applications on April 4-6, 2006, at Carson City, Nevada, before representatives of the Office of the State Engineer.¹²

FINDINGS OF FACT

I.

The Listers protested the applications on the grounds that Lincoln County Water District has no written plan for the use of the water applied for and there is no city or town within the area of the applications. The State Engineer finds there is no requirement in Nevada water law for a written plan to be provided in furtherance of a water right application. The State Engineer finds water right applications are almost always filed for proposed projects that are planned, but not in existence, and the water cannot be used until the State Engineer grants a permit that authorizes the use of the water. As discussed in Section III below, the Nevada Legislature has provided the Lincoln County Water District with the authority to serve water to all real property located within the boundaries of Lincoln County. Nevada water law requires that an applicant provide evidence of an actual beneficial use for the water applied for¹³ and proof satisfactory to the State Engineer of his intention in good faith to construct any work necessary to apply the water to the intended beneficial use with reasonable diligence and his financial ability and reasonable expectation to actually construct the work and apply the water to the intended beneficial use with reasonable diligence.¹⁴ The State Engineer finds, as discussed below, that the Applicant provided substantial evidence of a project where the water applied for would be used and proof satisfactory of construction of the work to apply the water to the intended beneficial use with reasonable diligence and the financial ability and reasonable expectation to actually construct the work and apply the water to the intended beneficial use with reasonable diligence.

II.

The Listers' protests allege that they have long argued that moving water from one basin to another is detrimental to the originating basin. The State Engineer finds that Nevada water law specifically provides for the interbasin transfer of water provided the applicant meets all of the

¹² Exhibit No. 1.

¹³ NRS § 533.035.

¹⁴ NRS § 533.370.

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necessary criteria found in the Nevada Revised Statutes, including but not limited to NRS §§ 533.370(5) and (6). Nevada Revised Statute § 533.370(6)(c) and (d) require the State Engineer to take into consideration whether the proposed action is environmentally sound as it relates to the basin from which the water is exported and whether the proposed action is an appropriate long-term use which will not unduly limit the future growth and development in the basin from which the water is exported. The State Engineer finds Nevada water law requires the State Engineer to consider factors relevant to the originating basin, but specifically provides for the interbasin transfer of water.

III.

The Listers' protests allege that the Lincoln County Water District is supposed to be a local government entity protecting and planning for the benefit of the citizens of Lincoln County but, that in teaming up with Vidler Water Company, the Lincoln County Water District has become merely speculative with the sole objective to make a profit. In 2003, the Nevada Legislature enacted legislation that provided for the creation of the Lincoln County Water District.¹⁵ The special legislative act that created the Lincoln County Water District provided that its jurisdiction and service area are all the real property located within the boundaries of Lincoln County and authorized the Lincoln County Water District to sell water and water rights and to enter into agreements with a private entity or corporation for the transfer or delivery of any water right or water appropriated.¹⁶

The State Engineer finds the Nevada Legislature gave the Lincoln County Water District its authority. The State Engineer finds the Lincoln County Water District like any other applicant has to demonstrate a beneficial use for the water applied for under these applications and has to satisfy the other statutory requirements. The State Engineer finds if the Protestant Listers have an issue with the operation of the Lincoln County Water District that is a matter outside of the State Engineer's jurisdiction.

IV.

Through testimony and evidence, the Applicants' expert witnesses presented their interpretation of the geology and hydrogeology of the Kane Springs Valley and vicinity. They conclude that the northern portion of the valley is underlain by a volcanic caldera complex and,

¹⁵ Chapter 474, Statutes of Nevada 2003.

¹⁶ *Id.* at Sections 11(7), 11(11), and 11(12).

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therefore, has low potential for regional ground-water flow. However, they interpreted the evidence as indicating that the southwestern portion of the basin is underlain by a significant thickness of carbonate rocks.¹⁷ The Applicants conducted a pumping test at their well KPW-1 and, based on the results of the test and their interpretation of the geology, concluded that there is the potential for considerable ground-water movement through the Paleozoic carbonate rocks in Kane Springs Valley.¹⁸ The Kane Springs Wash fault zone is oriented in a northeasterly direction, and is thought to both channel ground-water flow along its length from northeast to southwest, and to act as a barrier to ground-water flow across it from north to south. The witnesses also presented testimony supporting ground-water inflow into the Kane Springs Valley from the north.¹⁹

The State Engineer finds that the Applicants' interpretation of ground-water movement in the Kane Springs Valley from northeast to southwest and into Coyote Spring Valley, preferentially along the Kane Springs Wash fault zone, is generally consistent with the available data. The State Engineer further finds that the Applicants' pumping test supports the conclusion that there is considerable potential for ground-water flow in the carbonate rocks in the vicinity of well KPW-1. The State Engineer also finds that there was not sufficient evidence presented to support a determination of the potential for ground-water inflow into the Kane Springs Valley.

V.

The Applicants presented evidence to quantify subsurface inflow and outflow across the Kane Springs Valley Hydrographic Basin boundaries. The Applicants propose that ground water enters Kane Springs Valley from northern Coyote Spring Valley, passing through its western tip, and exits southwesterly back into Coyote Spring Valley. Local recharge is thought to combine with the inflow and exit the basin to the southwest. Since the water table is relatively deep in Kane Springs Valley and ET of ground water is negligible, virtually all ground-water discharge from the basin must occur via subsurface outflow.

Mr. Lewis applied Darcy's law to estimate the magnitude of the ground-water inflow into Kane Springs Valley Hydrographic Basin via a three-mile corridor on the western edge of Kane Springs Valley.²⁰ Darcy's law states the volume of flow is equal to aquifer transmissivity multiplied by aquifer width multiplied by the hydraulic gradient. He estimated transmissivity for

¹⁷ Transcript, pp. 43-47, 57; Exhibit No. 15, pp. 13-14; Exhibit No. 20, pp. 3-4.

¹⁸ Transcript, pp. 58-59, 62-63.

¹⁹ Exhibit No. 20, pp. 6-13.

²⁰ Exhibit No. 20, pp. 6-13.

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the “bulk aquifer” from the pumping test performed at the well identified as KPW-1. He then multiplied that value by three on the assumption that the aquifer is three times thicker than penetrated by the test well. For a value of hydraulic gradient, Mr. Lewis used water levels in wells CSVM-3 and CE-VF-2, which are located near the center of Coyote Spring Valley.

The State Engineer finds the Applicants’ inflow analysis is overly interpretive and without sufficient supporting evidence. Inflow into the basin is proposed to occur through a three-mile wide zone on the western basin boundary. Flow direction is assumed to be from the north to south even though there are no local hydraulic head data to support the hypothesis of hydraulic gradient or flow direction. The Applicants’ witness used hydraulic data from the KPW-1 pumping test, which is located approximately six miles from the proposed inflow area. The hydraulic gradient is assumed to be equal to that between wells CSVM-3 and CE-VF-2 even though these wells are located six and 15 miles away, respectively, from the proposed inflow zone. Inflow through the three-mile wide corridor is proposed by the Applicants to be 13,000 acre-feet per year. This amount is approximately one-third of the total amount of regional flow from Pahrnagat and Delamar Valleys to Coyote Spring Valley of approximately 37,000 acre-feet per year.²¹ However, the proposed flow corridor into Kane Springs Valley is a relatively narrow zone at the corner of the basin. Geologic structures in the area of the proposed inflow corridor strike north northeasterly, and may have the effect of channeling flow along them parallel to the basin boundary, similar to the conceptual model of the Applicants along the Kane Spring and Willow Spring fault zones. Geologic cross-section B-B’ shows a thrust block of low-permeability basement rocks that would act to block potential inflow.²² The State Engineer finds that sufficient data does not exist to substantiate or reliably estimate subsurface flows into the Kane Springs Valley Hydrographic Basin and the Applicants’ inflow estimates are hereby discounted and not accepted.

The Applicants’ outflow analysis utilized two estimates of transmissivity from the KPW-1 pumping test. This analysis used a measured transmissivity of 50,000 gallons per day/foot (gpd/ft), which is thought to be representative of the regional carbonate aquifer and a transmissivity of 300,000 gpd/ft, which is thought to be representative of the local Willow Spring fault zone. The Applicants “scaled-up” the pumping test transmissivities to a basin scale by

²¹ State Engineer’s Office, *Water for Nevada, State of Nevada Water Planning Report No. 3*, Oct. 1971.

²² Exhibit No. 15.

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multiplying the values by three. Outflow is thought to occur in a southwesterly direction parallel to the axis of the Kane Springs Valley. The outflow corridor is estimated to be four-miles wide by 3,000 feet thick. They attribute one-half mile of the four-mile width to the fault zone and the remaining three and one-half miles to regional conditions, each having separate hydraulic gradients for their flow calculations. For the regional flow they used a gradient of 0.005, and for the structural zone they used a gradient of 0.0005. Total basin outflow was calculated to be 16,000 acre-feet per year.²³

The State Engineer finds several irregularities and inconsistencies with the Applicants' analysis. The Applicants' hydrologist used a hydraulic gradient of 0.005 for the regional component of flow based on the water levels in wells CSVN-3 and CE-VF-2, which are located near the center of Coyote Spring Valley, rather than using a hydraulic gradient of 0.0004 for the regional component of flow based on water levels in wells KPW-1 and CSVN-4, which are located at the outflow of Kane Springs Valley Hydrographic Basin and better situated to measure the applicable gradient.²⁴ The Applicant calculated the regional component of outflow to be 15,000 acre-feet per year using the hydraulic gradient of 0.005 as opposed to an outflow calculation of 1,250 acre-feet per year using the lower hydraulic gradient of 0.0004. The State Engineer finds that using the higher hydraulic gradient of 0.005 to compute outflow from Kane Springs Valley Hydrographic Basin rather than using the lower gradient of 0.0004 between KPW-1 and CSVN-4 is in error and inconsistent with the Applicants' documented conceptual view of the flow system.²⁵

The Applicants' estimate of outflow along the structural zone was computed separately using a transmissivity of 900,000 gpd/ft and a hydraulic gradient of 0.0005. The State Engineer finds the Applicant incorrectly approximated the hydraulic gradient to be 0.0005, and should have used a hydraulic gradient of 0.0004.²⁶ Based on the actual hydraulic gradient of 0.0004 the resulting basin outflow along the structural zone would then be 1,000 acre-feet per year. Adding the estimated outflow along the structural zone of 1,000 acre-feet per year to the regional flow of 1,250 acre-feet per year results in an estimated basin outflow of 2,250 acre-feet annually rather than the Applicants' calculation of 16,000 acre-feet annually.

²³ Exhibit No. 16.

²⁴ *Ibid.*, pp. 20 and 31.

²⁵ Exhibit No. 17, p 21.

²⁶ Exhibit No. 20, p. 11.

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The State Engineer finds the Applicants' inflow and outflow analyses lack sufficient data to provide a reliable estimate of basin boundary flows. Furthermore, he finds the Applicants' conceptual analyses were overly interpretive and, in part, were inconsistent with their conceptual model of regional flow. The State Engineer finds that sufficient data were not collected or presented to substantiate the Applicants' estimate of subsurface flow into or out of the Kane Springs Valley Hydrographic Basin.

VI.

The Applicant presented a witness to address the geochemical framework of the Kane Springs Valley Hydrographic Basin and the White River flow system south of the Pahrangat shear zone. The witness presented evidence on stable isotopes, major ion chemistry, and carbon-14 analyses.²⁷ In summary, the geochemical evidence supports the ground-water gradient data that indicates Kane Springs Valley ground water flows into Coyote Spring Valley and that, in general, water in the White River flow system flows from north to south and mixes with local recharge en route to discharge areas. The witness presented deuterium data collected from springs in Kane Springs Valley believed to represent local recharge water, springs in Pahrangat Valley believed to represent regional carbonate water, and ground water from KPW-1 believed to represent a mix of local recharge water and regional carbonate water. Using a mixing equation the witness computed the percent of regional carbonate ground water from the KPW-1 deuterium sample to equal 77 percent.²⁸ If the same analysis is repeated using oxygen-18 instead of deuterium, the percent of regional carbonate ground water from the KPW-1 oxygen-18 sample equals 87 percent.²⁹ As previously discussed, the reinterpretation of the Applicants' subsurface outflow analysis resulted in approximately 2,250 acre-feet per year of basin outflow from the Kane Springs Valley Hydrographic Basin. The State Engineer finds applying the percentages of regional carbonate ground water from KPW-1 for both the deuterium and oxygen-18 samples, the local ground-water recharge component of the outflow would therefore be approximately 518 acre-feet per year and 293 acre-feet per year, respectively. These values appear to support the reconnaissance estimate of 500 acre-feet per year of recharge, however, it is recognized that the re-interpreted outflow is only an estimate, and its value is limited due to uncertain hydraulic parameters.³⁰

²⁷ Testimony of R. Glanzman; Exhibit No. 32.

²⁸ Exhibit No. 117, p. 10.

²⁹ Exhibit No. 34, Table 1, p. 2.

³⁰ State Engineer's Office, *Water for Nevada, State of Nevada Water Planning Report No. 3*, Oct. 1971.

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VII.

Testimony and evidence was presented in an attempt to support a determination that significantly more water is locally recharged in the Kane Springs Valley Hydrographic Basin than previously reported. The Applicants presented Mr. Walker, who possesses a background in range management, as a witness who used plant communities as a method to estimate precipitation. However, Mr. Walker also testified that the use of plant communities as a method to calculate recharge does not exist, and his methodology for calculating recharge is not used anywhere else in the United States.³¹ The Applicants then presented Mr. Lewis for the purpose of using Mr. Walker's estimation of precipitation for the establishment of new recharge estimates in the Kane Springs Valley Hydrographic Basin.³²

Reconnaissance investigations by the U.S.G.S. estimate the combined recharge for Kane Springs Valley, Coyote Spring Valley and the Muddy River Springs Area to be 2,600 acre-feet annually.³³ Recharge for Kane Springs Valley was further delineated in 1971 and was estimated to be 500 acre-feet per year.³⁴ The methods and estimates presented by the Applicants in Exhibit Nos. 29 and 30 used four estimates of precipitation. With each of the four estimates of precipitation, ground-water recharge was then estimated using two methods: a version of the well-known Maxey-Eakin technique and a water budget method. In total, the Applicants computed eight recharge estimates ranging from 5,300 to 14,155 acre-feet per year.³⁵

One method for estimating precipitation tied plant communities to precipitation and elevation, and then used elevation zones to distribute precipitation throughout the basin. The second method used a spatial distribution of vegetative zones and their respective precipitation based on a United States Department of Agriculture, Natural Resource Conservation Service technical guide for ecological site descriptions.³⁶ A third precipitation method used PRISM³⁷

³¹ Transcript, pp. 244, 264.

³² Transcript, pp. 245-246.

³³ T.E. Eakin, *Ground-water Resources – Reconnaissance Series Report 25, Ground-water Appraisal of Coyote Spring and Kane Spring Valleys and Muddy River Springs Area, Lincoln and Clark Counties, Nevada*, State of Nevada, Department of Conservation and Natural Resources, United States Department of Interior, Geologic Survey, February 1964.

³⁴ Transcript, p. 253.

³⁵ Exhibit No. 16, p. 5.

³⁶ Exhibit No. 29, pp. 6, 15-17.

³⁷ PRISM – Parameter-elevation Regressions on Independent Slopes Model and is a method of spatially distributing precipitation.

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modeled precipitation.³⁸ The last precipitation estimate was based on a local altitude-precipitation method developed by the Las Vegas Valley Water District.³⁹ For each of these precipitation estimates, Mr. Lewis applied both a numerical form of the Maxey-Eakin technique and water budget approach for estimating recharge.

However, Mr. Halford, as expert witness for the Protestant National Park Service, testified that the use of the Maxey-Eakin technique in each of these cases was in error,⁴⁰ because using the Maxey-Eakin recharge coefficients with any precipitation estimates other than the Hardman precipitation map is inappropriate. The Maxey-Eakin recharge coefficients are married to the Hardman map and cannot be used otherwise.⁴¹ Mr. Halford testified that if one is going to develop a new method of estimating recharge they must have the precipitation maps for the area of interest and controls on ground-water discharge, and then they can develop new recharge coefficients based on that information.⁴²

The Applicants also used a water-budget approach with each of the precipitation estimates to arrive at an estimate of recharge. In the approach for Kane Springs Valley Hydrographic Basin, it was estimated that recharge is equal to precipitation less the sum of evapotranspiration (ET), surface runoff and spring discharge. Surface runoff and spring discharge were each estimated to average a few hundred acre-feet annually; therefore, recharge was estimated to be approximately equal to precipitation minus ET. Due to the lack of ET measurements or estimates of ET in Kane Springs Valley, the Applicants used data from a United States Geologic Survey report on evapotranspiration in Ruby Valley, over 200 miles to the north.⁴³ Their evidence provides that a report prepared by Berger in 2001 reports an estimate of ET using the Bowen-ratio method for an upland-shrub non-phreatophytic plant community of 12 inches per year where annual precipitation was estimated to be 13 to 15 inches.⁴⁴ On that basis, the Applicants assume 12 inches per year of ET for areas receiving 13 to 15 inches of precipitation in Kane Springs Valley and 13 inches per year of ET for areas receiving greater than 15 inches per year of precipitation.

³⁸ Exhibit No. 29, p. 9.

³⁹ Exhibit No. 54, public administrative hearing before the State Engineer, July 16-20, 23-27, 2001, official records in the Office of the State Engineer.

⁴⁰ Transcript, pp. 489-520.

⁴¹ Transcript, p. 493.

⁴² Transcript, p. 495.

⁴³ Exhibit No. 29, p. 13.

⁴⁴ *Ibid.*

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However, the State Engineer believes the Applicants misinterpreted and/or misapplied the data from the Berger 2001 report, which states that precipitation at the Ruby Lake National Wildlife Refuge site for the 2000 water year was only 7.74 inches, or 58 percent of the 1961 to 1990 30-year average of 13.3 inches.⁴⁵ During this same time period, ET at the upland-shrub site was 11.96 inches.⁴⁶ The report does not indicate what ET rates might be in the upland-shrub community during average precipitation years, although the data does support higher daily ET rates in the summer months when there was an increase in available soil moisture from precipitation.⁴⁷ In addition, the Applicants did not provide evidence suggesting that the ET rates in areas that receive greater than 15 inches per year would remain constant at 13 inches. The Applicants also did not address other factors that differ between Kane Springs Valley and Ruby Valley that could have an effect on ET rates such as differences in temperature, solar radiation, time and type of precipitation, and variable plant species distinct from those in Kane Springs Valley.

The State Engineer recognizes the difficulty in accurately estimating recharge and even the Applicants admit that estimates of recharge are extremely problematic as it is a parameter that cannot be measured directly.⁴⁸ The State Engineer agrees that recharge is a very difficult parameter to measure, and if it is used to determine perennial yield, the uncertainty in the estimates must be recognized and a conservative approach taken. Given the uncertainties inherent in estimating recharge and the validity in the testimony of the Protestant's expert stating that the recharge technique applied was in error and inappropriate, the State Engineer finds that the Applicants' evidence and testimony lack the scientific and practical basis to substantiate the proffered recharge of 5,000 to 14,000 acre-feet annually and are hereby discounted and not accepted. However, the State Engineer also recognizes that the current reconnaissance estimate of average annual recharge is probably low.

The Death Valley flow system area lies west and southwest of Kane Springs Valley. Because the Kane Springs Valley climate, latitude, geology and soil types are similar to the Death Valley flow system basins, it is reasonable to expect that similar precipitation amounts will result in

⁴⁵ D.L. Berger, M.J. Johnson, M.L. Tumbusch, *Estimates of Evapotranspiration from the Ruby Lake National Wildlife Refuge Area, Ruby Valley, Northeastern Nevada, May 1999-October 2000*, Water-Resources Investigations Report 01-4234, United States Department of Interior, Geological Survey, Nevada Division of Water Resources and the United States Department of Interior, Fish and Wildlife Service, 2001.

⁴⁶ *Id.* at 25.

⁴⁷ *Id.* at 20.

⁴⁸ Transcript, p. 267.

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similar amounts of ground-water recharge. Recharge within the Death Valley regional flow system has been calibrated to measured discharge, and therefore provides a greater level of certainty than recharge estimates made without a comparative discharge.⁴⁹ Several basins within the Death Valley regional flow system have similar amounts of precipitation as Kane Springs Valley with the ground-water recharge in those basins ranging from 1% to 2% of total precipitation.⁵⁰ Recent estimates of precipitation in the Kane Springs Valley range from 120,000 to 140,000 acre-feet per year as opposed to the Hardman estimate of 80,000 acre-feet per year.⁵¹ Using a recharge to precipitation ratio of 1% to 2% as found in the Death Valley regional flow model for basins with similar amounts of precipitation, the recharge in Kane Springs Valley would be 1,200 to 2,800 acre-feet per year, which is substantially less than the Applicants' estimate of recharge of 5,000 to 14,000 acre-feet annually. This is a qualitative comparison, and is not proposed by the State Engineer to definitively estimate recharge in Kane Springs Valley, but serves as a barometer, for comparative purposes only, of recharge estimates in this area. The State Engineer finds recharge in Kane Springs Valley is uncertain, but is likely greater than the reconnaissance estimate of 500 acre-feet per year and less than the Applicant's estimates of 5,000 to 14,000 acre-feet per year.

VIII.

The perennial yield of a ground-water reservoir may be defined as the maximum amount of ground water that can be salvaged each year over the long term without depleting the ground-water reservoir. The perennial yield cannot be more than the natural recharge to a ground water basin and in some cases is less. In determining the amount of water available for appropriation in basins where outflow from one basin is part of the inflow to another basin, the State Engineer must take into consideration the amount of water appropriated in the upgradient basin and discount the amount from inflow into the downgradient basin. If the water appropriated in an upgradient basin is not deducted from the amount which discharges to the downgradient basin, it creates the potential for double accounting and regional over appropriation. Thus, the State Engineer is still able to manage the ground-water basins as they have been historically managed administratively, but also take into consideration the concerns that arise for ground-water basins that are hydrologically connected.

⁴⁹ Belcher, W., ed., 2004 Death Valley Regional Ground-Water Flow System, Nevada and California – Hydrogeologic Framework and Transient Ground-Water Flow Model, USGS SIR 2004-4205.

⁵⁰ Belcher, W., ed., 2004, Death Valley Regional Flow Model, USGS SIR 2004-4205.

⁵¹ Exhibit 16, p. 5.

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The Applicants propose that ground water flows from upgradient basins through Kane Springs Valley into downgradient basins. In the case of the Kane Springs Valley Hydrographic Basin, the upgradient basin and the downgradient basin is the Coyote Spring Valley Hydrographic Basin. That is, ground water is proposed to flow from northern Coyote Spring Valley into Kane Springs Valley then back into Coyote Spring Valley. The Protestant NPS argues that the State Engineer should consider any inflow into Kane Springs Valley from the Coyote Spring Valley as previously allocated in Coyote Spring Valley and the subsequent outflow from Kane Springs Valley should be permitted to flow into Coyote Spring Valley in its entirety to meet the approximate 16,000 acre-feet per year of senior appropriated rights there. The majority of those senior water rights were issued with the intent to develop ground water from the White River regional carbonate-rock aquifer system. Given the unique hydrologic connection between the Kane Springs Valley Hydrographic Basin and the Coyote Spring Valley Hydrographic Basin, the development of ground water within Kane Springs Valley will ultimately affect water levels and flows in the White River regional carbonate-rock aquifer system. However, the State Engineer believes a small amount of water can be developed in the Kane Springs Valley and not unreasonably impact existing rights in the discharge areas of the White River carbonate-rock aquifer system, which are already fully appropriated. Well KPW-1 lies within 1,000 feet of Coyote Spring Valley and pumping simulations by the Applicant show a cone of depression extending well into Coyote Spring Valley. To further minimize potential effects on existing rights in the discharge areas of the White River carbonate-rock aquifer system, the State Engineer will limit the amount of ground water that can be pumped from wells in Kane Springs Valley near the boundary with Coyote Spring Valley. After careful consideration of the uncertainties regarding the ranges of ground-water recharge, quantification of subsurface inflows and outflows, the demonstrated connection of Kane Springs Valley with the White River Regional flow system, and senior appropriated rights in the down-gradient basins, the State Engineer finds that 1,000 acre-feet is a reasonable amount to allow for appropriation from Kane Springs Valley.

IX.

Nevada Revised Statute § 533.370(5) provides that an applicant provide proof satisfactory to the State Engineer of his intention in good faith to construct any work necessary to apply the water to the intended beneficial use with reasonable diligence and his financial ability and

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reasonable expectation to actually construct the work and apply the water to the intended beneficial use with reasonable diligence. Nevada Revised Statute § 533.375 provides that in the case of an application or multiple applications proposing to divert more than 10 cubic feet per second (such as the applications under consideration here) the State Engineer may require in the case of an incorporated company the submission of articles of incorporation, the names and places of residence of directors and officers and the amount of its authorized and paid-up capital. If the applicant is not an incorporated company, he may require a statement as to the name of the person proposing to construct the work, and a showing of facts necessary to enable him to determine whether the applicant has the financial ability to carry out the proposed work and whether the application has been made in good faith.

The Applicants presented the Chairwoman for the Lincoln County Water District, Rhonda Hornbeck, as a witness who testified that the Lincoln County Water District through its partner Vidler Water Company has an agreement with Coyote Springs Investment (CSI) to provide wholesale water to CSI's development. Additionally, the witness indicated they are working with the United States Department of Interior, Bureau of Land Management to gain a right of way to bring water from the wellhead down to the CSI property. The testimony indicated that a general improvement district is in place, as is a planned unit development.⁵² The Applicants provided evidence on the plan of development, which is a report that was submitted to the United States Department of Interior, Bureau of Land Management, that identifies how the ground water will be withdrawn, how the pipes will be installed, what equipment is needed to complete the well and addresses the pipeline project to deliver the water to the place where it will be used, and pipeline permitting is underway.⁵³

When questioned whether the Lincoln County Water District had the financial resources to place the water to beneficial use, the witness for the Lincoln County Water District provided several scenarios as to how those financial resources might be obtained, but did not provide any specific evidence of having the financial resources in place. The testimony indicated that the possibilities include: (1) floating a bond with its partner Vidler Water Company; (2) asking the State of Nevada

⁵² Transcript, pp. 388-389; Exhibit No. 41; Exhibit No. 122 (Agreement dated Oct. 17, 2005, between Coyote Springs Investment, LLC and Lincoln County Water District and Vidler Water Company - marked as an exhibit after the hearing when document was filed upon request of the State Engineer.)

⁵³ Transcript, p. 95; Exhibit No. 26.

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for a low-interest loan; or (3) a development agreement with CSI, where CSI would pay for the infrastructure to place the water to beneficial use; however the witness then testified there is already an agreement in place with CSI paying the cost of infrastructure.⁵⁴

Dorothy-Timian Palmer, as a witness for the Applicants, testified that Vidler Water Company has already drilled a production well and a monitoring well and has spent a considerable amount of money on field work and analyses of that field work and has the financial ability to construct the work necessary to put the water to beneficial use.⁵⁵ The Agreement between CSI, the Lincoln County Water District and Vidler Water Company provides that CSI will purchase "all water available within the Kane Springs Basin." "Upon payment in full of the purchase price of Kane Water, the DISTRICT and VIDLER will convey the Kane Water by Water Rights Deed to CSI and will partially assign to CSI certain rights and delegate to CSI certain obligations related to the underlying water rights permit(s)."⁵⁶ The Applicants only intend to develop the water to the wellhead and CSI will develop the infrastructure to deliver the water from the wellhead to the development.⁵⁷

Harvey Whittemore, as a witness for the Applicants, testified that within the CSI project there would be two separate general improvement districts. The one in Lincoln County has already been formed; however, the one in Clark County was to be formed in June 2006. The testimony indicated that the water rights already held by CSI will be assigned for the benefit of the general improvement districts and the Clark and Lincoln County Commissions will act as trustees for the general improvement districts. Mr. Whittemore indicated that the development is at a stage where all of the approvals necessary for the first phase of construction have been acquired with respect to Clark County. As to the Lincoln County portion of the project, it is still subject to the completion of a multi-species habitat conservation plan, as well as a number of additional approvals from federal agencies. The water rights at issue here would ultimately be owned by the developer CSI and then transferred to the Lincoln County General Improvement District.⁵⁸ CSI has already received approval in the form of parcel maps, zoning entitlement and development agreements for 49,000 units in Clark County and 110,000 units in Lincoln County.⁵⁹

⁵⁴ Transcript, pp. 392-393.

⁵⁵ Transcript, pp. 458-461.

⁵⁶ Exhibit No. 122.

⁵⁷ Transcript, pp. 412-415.

⁵⁸ Transcript, pp. 419-420.

⁵⁹ Transcript, pp. 427, 439; Exhibit Nos. 43, 44, 45.

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The State Engineer finds the Applicants provided proof satisfactory to the State Engineer of an intention in good faith to construct any work necessary to apply the water to the intended beneficial use with reasonable diligence and a reasonable expectation to actually construct the work and apply the water to the intended beneficial use with reasonable diligence.

X.

Testimony and evidence indicate there are no permitted or certificated groundwater rights in Kane Springs Valley Hydrographic Basin.⁶⁰ However, the witness for the NPS testified that Kane Springs Valley Hydrographic Basin and Coyote Spring Valley are hydrographically and hydrologically one and the same basin. Approximately 16,100 acre-feet have been appropriated in Coyote Spring Valley and applications are pending for another 200,000 acre-feet annually. Therefore, there is no water available for appropriation.⁶¹ The State Engineer finds no water has been appropriated in Kane Springs Valley Hydrographic Basin and by limiting the quantity of water authorized for appropriation, the potential impacts to existing rights in down-gradient hydrographic basins will be minimized.

XI.

Nevada Revised Statute § 533.370(6) provides that in determining whether an application for an interbasin transfer of ground water must be rejected the State Engineer shall consider: (a) whether the applicant has justified the need to import water from another basin; (b) if the State Engineer determines that a plan for conservation of water is advisable for the basin into which the water is to be imported, whether the applicant has demonstrated that such a plan has been adopted and is effectively being carried out; (c) whether the proposed action is environmentally sound as it relates to the basin from which the water is exported; (d) whether the proposed action is an appropriate long-term use which will not unduly limit the future growth and development in the basin from which the water is exported; and (e) any other factor the State Engineer determines is relevant.

Testimony was provided as to the extent of the project proposed in Coyote Spring Valley and estimates of the quantity of water necessary to carry out the project. That testimony satisfactorily addresses the provision of whether the applicant has justified the need to import water

⁶⁰ Transcript, pp. 208-209.

⁶¹ Transcript, pp. 589-594.

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from another basin.⁶² Testimony was provided that indicated conservation measures are in place for the planned development similar to traditional development measures associated with development in southern Nevada that have been adopted and imposed,⁶³ and there is no evidence that the appropriation of water from Kane Springs Valley Hydrographic Basin will damage the environment of the valley.

Testimony was provided that indicated there is no private land within Kane Springs Valley Hydrographic Basin, rather all land within the valley is owned by the federal government; therefore, the use of the water will not unduly limit future growth and development in Kane Springs Valley Hydrographic Basin.⁶⁴

The State Engineer finds the evidence does not support rejection of the application for an interbasin transfer of water.

XII.

Witnesses for both the Applicants (Glanzman)⁶⁵ and the Protestant NPS (Van Liew)⁶⁶ agree that the discharge at Rogers and Blue Point Springs in the Lake Mead National Recreation Area is not entirely carbonate-rock aquifer discharge, but is composed of some local precipitation that infiltrates and mixes with the carbonate-rock aquifer water that is flowing toward land surface along fault structures. Mr. Glanzman testified that in general when water in the White River flow system flows from north to south it mixes with local recharge en route to discharge areas at the Muddy River Springs Area and Rogers Springs and Blue Point Springs.⁶⁷ Using isotopic data, Mr. Glanzman estimated that approximately 25% of the discharge at Rogers Springs and Blue Point Springs could be characterized as regional carbonate water. For purposes of his analysis, Mr. Glanzman considered water in the carbonate aquifer of Pahranaagat Valley to be 100% carbonate water.^{68,69} Mr. Van Liew testified that discharge from the White River flow system appears to be predominantly at the Muddy River Springs, Rogers Springs and Blue Point Springs and raised the

⁶² Transcript, pp. 427-445.

⁶³ Transcript, pp. 428-429.

⁶⁴ Transcript, pp. 207-208.

⁶⁵ Transcript, pp. 115-203, 221-236.

⁶⁶ Transcript, pp. 523-621.

⁶⁷ Exhibit No. 34; Transcript, pp. 115-203, 221-236.

⁶⁸ Transcript, pp. 137-138.

⁶⁹ Exhibit No. 117.

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argument that there does not seem to be anywhere else for the ground water to flow. In addition, he doubted much water moved out to the Lake Mead area and testified that the ground-water gradient supports that conclusion.

The State Engineer finds there is not substantial evidence that the appropriation of the limited quantity being granted under this ruling will likely impair the flow at Muddy River Springs, Rogers Springs or Blue Point Springs.

XIII.

By letter dated February 6, 2006, the NPS and FWS requested the State Engineer amend State Engineer's Order No. 1169 to include the Kane Springs Valley Hydrographic Area.⁷⁰ The reasoning behind the request is that these agencies believe Kane Springs Valley and Coyote Spring Valley, while administratively classified as separate hydrographic basins, are actually a single distinct hydrologic drainage basin and should be managed as such. However, during the public administrative hearing, the FWS indicated that the resolution of its protests pursuant to the Stipulation also goes to its statements in the February 6, 2006, letter. Thus, the Stipulation was presented in place of the FWS request to include Kane Springs Valley within the provisions of Order No. 1169.⁷¹ However, the request by the NPS to include the Kane Springs Valley Hydrographic Basin within the provisions of Order No. 1169 still remains. Thus, two separate agencies within the United States Department of Interior take different positions with regard to the request to include Kane Springs within the provisions of Order No. 1169.

The witness for the Protestant NPS testified as to various reports and information that all conclude that the discharge from the Muddy River Springs is regional in nature, that a sufficient quantity does not come from local recharge to support the discharge and that a substantial portion of the discharge of the region is concentrated in the Muddy River Springs Area.⁷² Citing to Exhibit No. 91, the witness noted that the writer of that report found that the "Coyote Springs Valley, Kane Springs Valley and the Muddy River Springs hydrographic areas (1,025 square miles) in southern Lincoln and Clark Counties have been combined for this report because the areas are hydrologically and topographically connected."⁷³ The faults in the area are believed to control the majority of

⁷⁰ Exhibit No. 10.

⁷¹ Transcript, pp. 12-13.

⁷² Transcript, pp. 530-581; *See*, Exhibit Nos. 87, 88, 91.

⁷³ Transcript, p. 533.

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ground-water movement through the carbonate aquifer, including Kane Springs Wash fault zone, which the witness believes to be a conduit for flow to Coyote Spring Valley.⁷⁴ Additionally, the NPS witness believes that the Kane Springs Valley Hydrographic Basin and the Coyote Spring Valley are one hydrographic area.⁷⁵

A witness for the Applicants indicated that there is a presumption that the Kane Springs Wash fault zone is effectively a no-flow boundary such that water flowing into Kane Springs Valley Hydrographic Basin flows out of Kane Springs Wash into Coyote Spring Valley, and that the water that is recharged in Kane Springs Valley Hydrographic Basin flows into Coyote Spring Valley.⁷⁶ Additionally, evidence developed from the well pump test and analyzed in conjunction with other evidence, such as the implication of a flat gradient, indicates a relatively high transmissivity across the southern half of the study area, indicating a high potential for regional ground-water flow.⁷⁷

The State Engineer finds the evidence indicates a strong hydrologic connection between Kane Springs Valley and Coyote Spring Valley, specifically, that ground water flows from Kane Springs Valley into Coyote Spring Valley. However, carbonate water levels near the boundary between Kane Springs Valley and Coyote Spring Valley are approximately 1,875 feet in elevation, and in southern Coyote Spring Valley and throughout most of the other basins covered under Order No. 1169, carbonate-rock aquifer water levels are mostly between 1,800 feet and 1,825 feet. This marked difference in head supports the probability of a low-permeability structure or change in lithology between Kane Springs Valley and the southern part of Coyote Spring Valley. The State Engineer finds Order No. 1169 was issued to address the requests for the additional appropriation of water filed in Coyote Spring Valley, but the focus of the additional study ordered is the Muddy River Springs Area. The State Engineer finds there is not substantial evidence that the appropriation of a limited quantity of water in Kane Springs Valley Hydrographic Basin will have any measurable impact on the Muddy River Springs that warrants the inclusion of Kane Springs Valley in Order No. 1169. Therefore, the State Engineer denies the request to hold these applications in abeyance and include Kane Spring Valley within the provisions of Order No. 1169.

⁷⁴ Transcript, pp. 545-550.

⁷⁵ Transcript, pp. 589-591.

⁷⁶ Transcript, pp. 291, 303.

⁷⁷ Transcript, pp. 329-330.

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XIV.

The Applicants requested that the State Engineer act on Applications 72220 and 72221 and grant them for a total combined duty of 5,000 acre-feet annually and hold Applications 72218 and 72219 in abeyance. The State Engineer finds that the total amount of 1,000 acre-feet annually of groundwater available to be appropriated in Kane Springs Valley Hydrographic Basin is less than the requested 5,000 acre-feet annually; therefore the State Engineer finds he will not hold any of the applications in abeyance.

CONCLUSIONS

I.

The State Engineer has jurisdiction over the parties and the subject matter of this action and determination.⁷⁸

II.

The State Engineer is prohibited by law from granting a permit to appropriate the public waters where:⁷⁹

- A. there is no unappropriated water at the proposed source;
- B. the proposed use or change conflicts with existing rights;
- C. the proposed use or change conflicts with protectible interests in existing domestic wells as set forth in NRS § 533.024; or
- D. the proposed use or change threatens to prove detrimental to the public interest.

III.

The State Engineer concludes that to permit the appropriation of water in an amount greater than permitted under this ruling will conflict with existing rights and threaten to prove detrimental to the public interest.

RULING

The protests to the applications are hereby upheld in part and overruled in part. Application 72220 is hereby granted for a duty of 500 acre-feet annually. Applications 72218, 72219, and 72221 are hereby granted for a total combined duty of 500 acre-feet annually.

⁷⁸ NRS chapters 533 and 534.

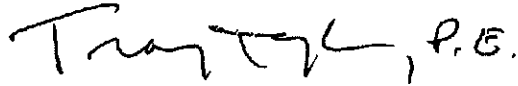
⁷⁹ NRS 533.370(5).

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Applications 72218, 72219, 72220, and 72221 are granted subject to:

1. The payment of statutory permit fees;
2. A monitoring plan to be approved by this office.

Respectfully submitted,



TRACY TAYLOR, P.E.
State Engineer

TT /jm

Dated this 2nd day of
February, 2007.



Exhibit 4



Permit No. 72218

THE STATE OF NEVADA

PERMIT TO APPROPRIATE WATER

Name of applicant: Lincoln County Water District and Vidler Water Company, Inc.
 Source: UNDERGROUND
 Basin: KANE SPRINGS VALLEY
 Manner of Use: MUNICIPAL
 Period of Use: January 1st to December 31st
 Priority Date: 02/14/2005

APPROVAL OF STATE ENGINEER

This is to certify that I have examined the foregoing application, and do hereby grant the same, subject to the following limitations and conditions:

This permit is issued subject to existing rights. It is understood that the amount of water herein granted is only a temporary allowance and that the final water right obtained under this permit will be dependent upon the amount of water actually placed to beneficial use. It is also understood that this right must allow for a reasonable lowering of the static water level. This well shall be equipped with a two (2) inch opening for measuring depth to water. If the well is flowing, a valve must be installed and maintained to prevent waste. A totalizing meter must be installed and maintained in the discharge pipeline near the point of diversion and accurate measurements must be kept of water placed to beneficial use. The totalizing meter must be installed before any use of water begins, or before the Proof of Completion of Work is filed. This source is located within an area designated by the State Engineer, pursuant to NRS 534.030. The State retains the right to regulate the use of the water herein granted at any and all times.

Monthly records shall be kept of the amount of water pumped from this well and the records submitted to the State Engineer on a quarterly basis within 30 days after the end of each calendar quarter.

This permit does not extend the permittee the right of ingress and egress on public, private or corporate lands.

The total combined duty of water under Permits 72218, 72219 and 72221 shall not exceed 500.0 acre-feet annually.

The total combined duty of water under Permits 72218, 72219, 72220 and 72221 shall not exceed 1000.0 acre-feet annually.

The issuance of this permit does not waive the requirements that the permit holder obtain other permits from State, Federal and local agencies.

This permit is issued subject to State Engineer's Ruling #5712, dated February 2, 2007.

Before any pumping can occur from this well, a monitoring plan must be submitted to and approved by this office.

The well must be sealed with cement grout, concrete grout or neat cement from ground level to 100 feet.

The point of diversion and place of use is as described under items 5 & 7 respectively on the submitted application to support this permit.

The amount of water to be appropriated shall be limited to the amount which can be applied to beneficial use, and not to exceed 6.0 cubic feet per second, but not to exceed 500.0 acre-feet annually.

Work must be prosecuted with reasonable diligence and proof of completion of work shall be filed on or before:

May 31, 2012

Water must be placed to beneficial use and proof of the application of water to beneficial use shall be filed on or before:

May 31, 2017

Map in support of proof of beneficial use shall be filed on or before:

N/A

IN TESTIMONY WHEREOF, I, TRACY TAYLOR, P.E.,

State Engineer of Nevada, have hereunto set my hand and the seal of my office, this 31 day of May, A.D. 2007

Tracy Taylor, P.E.
 State Engineer

Completion of work filed _____

Proof of beneficial use filed _____

Cultural map filed _____

Certificate No. _____ Issued _____

No. 72218

APPLICATION FOR PERMIT
TO APPROPRIATE THE PUBLIC WATERS OF THE STATE OF NEVADA

Date of filing in State Engineer's Office FEB 14 2005

Returned to applicant for correction _____

Corrected application filed _____

Map filed APR 05 1999 under 64688

The applicant **Lincoln County Water District and Vidler Water Company, Inc.** make application for permission to appropriate the public waters of the State of Nevada, as hereinafter stated.

1. The source of the proposed appropriation is **Underground**
2. The amount of water applied for is **6.0 cfs** second-feet
 - (a) If stored in reservoir give number of acre-feet
3. The water to be used for **Municipal**
4. If use is for:
 - (a) Irrigation, state number of acres to be irrigated
 - (b) Stockwater, state number and kinds of animals to be watered
 - (c) Other use (describe fully under No. 12. "Remarks")
 - (d) Power:
 - (1) Horsepower developed
 - (2) Point of return of water to stream
5. The water is to be diverted from its source at the following point **On unsurveyed ground within the SW¼ SE¼ Sec. 25, T.8S., R.65E., M.D.B.&M., or at a point from which the SW¼ corner of Section 36, T.8S., R.65E., M.D.B.&M. bears S. 26° 36' W., a distance of 7338 feet. Please refer to supporting map filed under Application Number 64688 depicting the proposed Point of Diversion.**
6. Place of Use **Within the Coyote Springs Valley Hydrographic Basin (210) (see attached sheet) Please refer to supporting map filed under Application Number 71722 for the proposed Place of Use.**
7. Use will begin about **January 1** and end about **December 31** of each year.
8. Description of proposed works **a drilled and cased well, equipped with a pump, motor and pipeline to proposed place of use**
9. Estimated cost of works **\$100,000.00**
10. Estimated time required to construct works **5 years**
11. Estimated time required to complete the application of water to beneficial use **10 years**

72218

12. Remarks: Please refer to supporting map filed under Application Number 64688 depicting the proposed Point of Diversion. Please refer to supporting map filed under Application Number 71722 depicting the proposed Place of Use.

By **Jennifer Morgan s/Jennifer Morgan**
704 W. Nye Lane, Suite 201
Carson City, NV 89703

Compared gkl/sam

Protested ^(S/D 3-23-06) 4/1/05 White Pine Co. 5/9/05 Wayne Ruby & Bevan Lister 5/12/05 USDI Park Service
Pro. Overruled 2-2-2007 See Ruling #5712

72218

Place of Use Description

Those portions of the following Townships and Ranges lying within the Coyote Springs Valley Hydrographic Basin (210):

Portions of T. 8 S., R. 62 E.
Portions of T. 8 S., R. 63 E.
Portions of T. 8 S., R. 64 E.

Portions of T. 9 S., R. 61 E.
Portions of T. 9 S., R. 62 E.
Portions of T. 9 S., R. 63 E.
Portions of T. 9 S., R. 64 E.

Portions of T. 10 S., R. 61 E.
All of T. 10 S., R. 62 E.
Portions of T. 10 S., R. 63 E.
Portions of T. 10 S., R. 64 E.

Portions of T. 11 S., R. 61 E.
All of T. 11 S., R. 62 E.
Portions of T. 11 S., R. 63 E.
Portions of T. 11 S., R. 64 E.

Portions of T. 12 S., R. 61 E.
All of T. 12 S., R. 62 E.
All of T. 12 S., R. 63 E.
Portions of T. 12 S., R. 64 E.

Portions of T. 12.5 S., R. 61 E.
Portions of T. 12.5 S., R. 62 E.

Portions of T. 13 S., R. 61 E.
All of T. 13 S., R. 62 E.
Portions of T. 13 S., R. 63 E.
Portions of T. 13 S., R. 64 E.

Portions of T. 13.5 S., R. 63 E.

Portions of T. 14 S., R. 61 E.
All of T. 14 S., R. 62 E.
Portions of T. 14 S., R. 63 E.

Portions of T. 15 S., R. 61 E.
Portions of T. 15 S., R. 62 E.
Portions of T. 15 S., R. 63 E.

Portions of T. 16 S., R. 62 E.

Exhibit 5



Permit No. 72219

THE STATE OF NEVADA

PERMIT TO APPROPRIATE WATER

Name of applicant: Lincoln County Water District and Vidler Water Company, Inc.
Source: UNDERGROUND
Basin: KANE SPRINGS VALLEY
Manner of Use: MUNICIPAL
Period of Use: January 1st to December 31st
Priority Date: 02/14/2005

APPROVAL OF STATE ENGINEER

This is to certify that I have examined the foregoing application, and do hereby grant the same, subject to the following limitations and conditions:

This permit is issued subject to existing rights. It is understood that the amount of water herein granted is only a temporary allowance and that the final water right obtained under this permit will be dependent upon the amount of water actually placed to beneficial use. It is also understood that this right must allow for a reasonable lowering of the static water level. This well shall be equipped with a two (2) inch opening for measuring depth to water. If the well is flowing, a valve must be installed and maintained to prevent waste. A totalizing meter must be installed and maintained in the discharge pipeline near the point of diversion and accurate measurements must be kept of water placed to beneficial use. The totalizing meter must be installed before any use of water begins, or before the Proof of Completion of Work is filed. This source is located within an area designated by the State Engineer, pursuant to NRS 534.030. The State retains the right to regulate the use of the water herein granted at any and all times.

Monthly records shall be kept of the amount of water pumped from this well and the records submitted to the State Engineer on a quarterly basis within 30 days after the end of each calendar quarter.

This permit does not extend the permittee the right of ingress and egress on public, private or corporate lands.

The total combined duty of water under Permits 72218, 72219 and 72221 shall not exceed 500.0 acre-feet annually.

The total combined duty of water under Permits 72218, 72219, 72220 and 72221 shall not exceed 1000.0 acre-feet annually.

The issuance of this permit does not waive the requirements that the permit holder obtain other permits from State, Federal and local agencies.

This permit is issued subject to State Engineer's Ruling #5712, dated February 2, 2007.

Before any pumping can occur from this well, a monitoring plan must be submitted to and approved by this office.

The well must be sealed with cement grout, concrete grout or neat cement from ground level to 100 feet.

The point of diversion and place of use is as described under items 5 & 7 respectively on the submitted application to support this permit.

The amount of water to be appropriated shall be limited to the amount which can be applied to beneficial use, and not to exceed 6.0 cubic feet per second, but not to exceed 500.0 acre-feet annually.

Work must be prosecuted with reasonable diligence and proof of completion of work shall be filed on or before:

May 3/, 2012

Water must be placed to beneficial use and proof of the application of water to beneficial use shall be filed on or before:

May 3/, 2017

Map in support of proof of beneficial use shall be filed on or before:

N/A

IN TESTIMONY WHEREOF, I, TRACY TAYLOR, P.E.,

State Engineer of Nevada, have hereunto set my hand and the seal of my office, this 3/ day of May, A.D. 2007

Tracy Taylor, P.E.
State Engineer

Completion of work filed _____

Proof of beneficial use filed _____

Cultural map filed _____

Certificate No. _____ Issued _____

No. 72219

APPLICATION FOR PERMIT
TO APPROPRIATE THE PUBLIC WATERS OF THE STATE OF NEVADA

Date of filing in State Engineer's Office FEB 14 2005

Returned to applicant for correction _____

Corrected application filed _____

Map filed APR 05 1999 under 64688

The applicant **Lincoln County Water District and Vidler Water Company, Inc.** make application for permission to appropriate the public waters of the State of Nevada, as hereinafter stated.

1. The source of the proposed appropriation is **Underground**
2. The amount of water applied for is **6.0 cfs second-feet**
 - (a) If stored in reservoir give number of acre-feet
3. The water to be used for **Municipal**
4. If use is for:
 - (a) Irrigation, state number of acres to be irrigated
 - (b) Stockwater, state number and kinds of animals to be watered
 - (c) Other use (describe fully under No. 12. "Remarks")
 - (d) Power:
 - (1) Horsepower developed
 - (2) Point of return of water to stream
5. The water is to be diverted from its source at the following point **On unsurveyed ground within the SE¼ SW¼ Sec. 31, T.9S., R.65E., M.D.B.&M., or at a point from which the SW¼ corner of Section 35, T.8S., R.65E., M.D.B.&M. bears N. 32° 24' E., a distance of 37,144 feet. Please refer to supporting map filed under Application Number 64689 (map 64688) depicting the proposed Point of Diversion.**
6. Place of Use **Within the Coyote Springs Valley Hydrographic Basin (210) (see attached sheet) Please refer to supporting map filed under Application Number 71722 for the proposed Place of Use.**
7. Use will begin about **January 1** and end about **December 31** of each year.
8. Description of proposed works **a drilled and cased well, equipped with a pump, motor and pipeline to proposed place of use**
9. Estimated cost of works **\$100,000.00**
10. Estimated time required to construct works **5 years**
11. Estimated time required to complete the application of water to beneficial use **10 years**

72219

12. Remarks: Please refer to supporting map filed under Application Number 64689 depicting the proposed Point of Diversion. Please refer to supporting map filed under Application Number 71722 depicting the proposed Place of Use.

By Jennifer Morgan s/Jennifer Morgan
704 W. Nye Lane, Suite 201
Carson City, NV 89703

Compared gkl/sam

Protested ^{0/0 3-23-06} 4/1/05 by: White Pine Co., 5/9/05 by Wayne, Ruby & Bevan Lister 5/12/05 by: USDI
Nat. Park Service
Pro. Overruled 2-2-2007 See Ruling *****
#5712

72219

Place of Use Description

Those portions of the following Townships and Ranges lying within the Coyote Springs Valley Hydrographic Basin (210):

Portions of T. 8 S., R. 62 E.

Portions of T. 8 S., R. 63 E.

Portions of T. 8 S., R. 64 E.

Portions of T. 9 S., R. 61 E.

Portions of T. 9 S., R. 62 E.

Portions of T. 9 S., R. 63 E.

Portions of T. 9 S., R. 64 E.

Portions of T. 10 S., R. 61 E.

All of T. 10 S., R. 62 E.

Portions of T. 10 S., R. 63 E.

Portions of T. 10 S., R. 64 E.

Portions of T. 11 S., R. 61 E.

All of T. 11 S., R. 62 E.

Portions of T. 11 S., R. 63 E.

Portions of T. 11 S., R. 64 E.

Portions of T. 12 S., R. 61 E.

All of T. 12 S., R. 62 E.

All of T. 12 S., R. 63 E.

Portions of T. 12 S., R. 64 E.

Portions of T. 12.5 S., R. 61 E.

Portions of T. 12.5 S., R. 62 E.

Portions of T. 13 S., R. 61 E.

All of T. 13 S., R. 62 E.

Portions of T. 13 S., R. 63 E.

Portions of T. 13 S., R. 64 E.

Portions of T. 13.5 S., R. 63 E.

Portions of T. 14 S., R. 61 E.

All of T. 14 S., R. 62 E.

Portions of T. 14 S., R. 63 E.

Portions of T. 15 S., R. 61 E.

Portions of T. 15 S., R. 62 E.

Portions of T. 15 S., R. 63 E.

Portions of T. 16 S., R. 62 E.

Exhibit 6



Permit No. 72220

THE STATE OF NEVADA

PERMIT TO APPROPRIATE WATER

Name of applicant: Lincoln County Water District and Vidler Water Company, Inc.
 Source: UNDERGROUND
 Basin: KANE SPRINGS VALLEY
 Manner of Use: MUNICIPAL
 Period of Use: January 1st to December 31st
 Priority Date: 02/14/2005

APPROVAL OF STATE ENGINEER

This is to certify that I have examined the foregoing application, and do hereby grant the same, subject to the following limitations and conditions:

This permit is issued subject to existing rights. It is understood that the amount of water herein granted is only a temporary allowance and that the final water right obtained under this permit will be dependent upon the amount of water actually placed to beneficial use. It is also understood that this right must allow for a reasonable lowering of the static water level. This well shall be equipped with a two (2) inch opening for measuring depth to water. If the well is flowing, a valve must be installed and maintained to prevent waste. A totalizing meter must be installed and maintained in the discharge pipeline near the point of diversion and accurate measurements must be kept of water placed to beneficial use. The totalizing meter must be installed before any use of water begins, or before the Proof of Completion of Work is filed. This source is located within an area designated by the State Engineer, pursuant to NRS 534.030. The State retains the right to regulate the use of the water herein granted at any and all times.

Monthly records shall be kept of the amount of water pumped from this well and the records submitted to the State Engineer on a quarterly basis within 30 days after the end of each calendar quarter.

This permit does not extend the permittee the right of ingress and egress on public, private or corporate lands.

The total combined duty of water under Permits 72218, 72219 and 72221 shall not exceed 500.0 acre-feet annually.

The total combined duty of water under Permits 72218, 72219, 72220 and 72221 shall not exceed 1000.0 acre-feet annually.

The issuance of this permit does not waive the requirements that the permit holder obtain other permits from State, Federal and local agencies.

This permit is issued subject to State Engineer's Ruling #5712, dated February 2, 2007.

Before any pumping can occur from this well, a monitoring plan must be submitted to and approved by this office.

The well must be sealed with cement grout, concrete grout or neat cement from ground level to 100 feet.

The point of diversion and place of use is as described under items 5 & 7 respectively on the submitted application to support this permit.

The amount of water to be appropriated shall be limited to the amount which can be applied to beneficial use, and not to exceed 6.0 cubic feet per second, but not to exceed 500 acre-feet annually.

Work must be prosecuted with reasonable diligence and proof of completion of work shall be filed on or before:

May 31, 2012

Water must be placed to beneficial use and proof of the application of water to beneficial use shall be filed on or before:

May 31, 2017

Map in support of proof of beneficial use shall be filed on or before:

N/A

IN TESTIMONY WHEREOF, I, TRACY TAYLOR, P.E.,

State Engineer of Nevada, have hereunto set my hand and the seal of my office, this 31 day of May, A.D. 2007

Tracy Taylor, P.E.
State Engineer

Completion of work filed _____

Proof of beneficial use filed _____

Cultural map filed _____

Certificate No. _____ Issued _____

AMENDED

No. 72220

APPLICATION FOR PERMIT
TO APPROPRIATE THE PUBLIC WATERS OF THE STATE OF NEVADA

Date of filing in State Engineer's Office FEB 14 2005
Returned to applicant for correction MAR 17 2005
Corrected application filed JUL 15 2005
Map filed JUL 15 2005

The applicant **Lincoln County Water District and Vidler Water Company, Inc.** hereby make application for permission to appropriate the public waters of the State of Nevada, as hereinafter stated.

1. The source of the proposed appropriation is **Underground**
2. The amount of water applied for is **6.0 cfs** second-feet
 - (a) If stored in reservoir give number of acre-feet
3. The water to be used for **Municipal**
4. If use is for:
 - (a) Irrigation, state number of acres to be irrigated
 - (b) Stockwater, state number and kinds of animals to be watered
 - (c) Other use (describe fully under No. 12. "Remarks")
 - (d) Power:
 - (1) Horsepower developed
 - (2) Point of return of water to stream
5. The water is to be diverted from its source at the following point **Within the SE/4 SW/4, Section 6, T.11S., R.64E., M.D.B.&M. or at a point from which the northwest corner of said Section 6 bears N. 20° 29' 42" W. a distance of 4024.25 feet**
6. Place of Use **Within the Coyote Springs Valley Hydrographic Basin (210) (see attached sheet) Please refer to supporting map filed under Application Number 71722 for the proposed Place of Use.**
7. Use will begin about **January 1** and end about **December 31** of each year.
8. Description of proposed works **a drilled and cased well, equipped with a pump, motor and pipeline to proposed place of use**
9. Estimated cost of works **\$100,000.00**
10. Estimated time required to construct works **5 years**
11. Estimated time required to complete the application of water to beneficial use **10 years**

72220

12. Remarks: Please refer to supporting map filed under Application Number 71722 depicting the proposed Place of Use.

By **Jennifer Morgan s/ Jennifer L. Morgan**
704 W. Nye Lane, Suite 201
Carson City, NV 89703

Compared gkl/sam

Protested 10/14/05 by U.S.D.I..National Park Service & U.S. Fish & Wildlife
Pro. Overruled 2-2-2007 See Ruling #5/12

72220

Place of Use Description

Those portions of the following Townships and Ranges lying within the Coyote Springs Valley Hydrographic Basin (210):

Portions of T. 8 S., R. 62 E.

Portions of T. 8 S., R. 63 E.

Portions of T. 8 S., R. 64 E.

Portions of T. 9 S., R. 61 E.

Portions of T. 9 S., R. 62 E.

Portions of T. 9 S., R. 63 E.

Portions of T. 9 S., R. 64 E.

Portions of T. 10 S., R. 61 E.

All of T. 10 S., R. 62 E.

Portions of T. 10 S., R. 63 E.

Portions of T. 10 S., R. 64 E.

Portions of T. 11 S., R. 61 E.

All of T. 11 S., R. 62 E.

Portions of T. 11 S., R. 63 E.

Portions of T. 11 S., R. 64 E.

Portions of T. 12 S., R. 61 E.

All of T. 12 S., R. 62 E.

All of T. 12 S., R. 63 E.

Portions of T. 12 S., R. 64 E.

Portions of T. 12.5 S., R. 61 E.

Portions of T. 12.5 S., R. 62 E.

Portions of T. 13 S., R. 61 E.

All of T. 13 S., R. 62 E.

Portions of T. 13 S., R. 63 E.

Portions of T. 13 S., R. 64 E.

Portions of T. 13.5 S., R. 63 E.

Portions of T. 14 S., R. 61 E.

All of T. 14 S., R. 62 E.

Portions of T. 14 S., R. 63 E.

Portions of T. 15 S., R. 61 E.

Portions of T. 15 S., R. 62 E.

Portions of T. 15 S., R. 63 E.

Portions of T. 16 S., R. 62 E.

Exhibit 7



Permit No. 72221

THE STATE OF NEVADA

PERMIT TO APPROPRIATE WATER

Name of applicant: Lincoln County Water District & Vidler Water Company Inc.
Source: UNDERGROUND
Basin: KANE SPRINGS VALLEY
Manner of Use: MUNICIPAL
Period of Use: January 1st to December 31st
Priority Date: 02/14/2005

APPROVAL OF STATE ENGINEER

This is to certify that I have examined the foregoing application, and do hereby grant the same, subject to the following limitations and conditions:

This permit is issued subject to existing rights. It is understood that the amount of water herein granted is only a temporary allowance and that the final water right obtained under this permit will be dependent upon the amount of water actually placed to beneficial use. It is also understood that this right must allow for a reasonable lowering of the static water level. This well shall be equipped with a two (2) inch opening for measuring depth to water. If the well is flowing, a valve must be installed and maintained to prevent waste. A totalizing meter must be installed and maintained in the discharge pipeline near the point of diversion and accurate measurements must be kept of water placed to beneficial use. The totalizing meter must be installed before any use of water begins, or before the Proof of Completion of Work is filed. This source is located within an area designated by the State Engineer, pursuant to NRS 534.030. The State retains the right to regulate the use of the water herein granted at any and all times.

Monthly records shall be kept of the amount of water pumped from this well and the records submitted to the State Engineer on a quarterly basis within 30 days after the end of each calendar quarter.

This permit does not extend the permittee the right of ingress and egress on public, private or corporate lands.

The total combined duty of water under Permits 72218, 72219 and 72221 shall not exceed 500.0 acre-feet annually.

The total combined duty of water under Permits 72218, 72219, 72220 and 72221 shall not exceed 1000.0 acre-feet annually.

The issuance of this permit does not waive the requirements that the permit holder obtain other permits from State, Federal and local agencies.

This permit is issued subject to State Engineer's Ruling #5712, dated February 2, 2007.

Before any pumping can occur from this well, a monitoring plan must be submitted to and approved by this office.

The well must be sealed with cement grout, concrete grout or neat cement from ground level to 100 feet.

The point of diversion and place of use is as described under items 5 & 7 respectively on the submitted application to support this permit.

The amount of water to be appropriated shall be limited to the amount which can be applied to beneficial use, and not to exceed 6.0 cubic feet per second, but not to exceed 500 acre-feet annually.

Work must be prosecuted with reasonable diligence and proof of completion of work shall be filed on or before:

May 31, 2012

Water must be placed to beneficial use and proof of the application of water to beneficial use shall be filed on or before:

May 31, 2017

Map in support of proof of beneficial use shall be filed on or before:

N/A

IN TESTIMONY WHEREOF, I, TRACY TAYLOR, P.E.,

State Engineer of Nevada, have hereunto set my hand and the seal of my office, this 31 day of May, A.D. 2007

Tracy Taylor, P.E.
State Engineer

Completion of work filed _____

Proof of beneficial use filed _____

Cultural map filed _____

Certificate No. _____ Issued _____

A M E N D E D

No. 72221

APPLICATION FOR PERMIT
TO APPROPRIATE THE PUBLIC WATERS OF THE STATE OF NEVADA

Date of filing in State Engineer's Office FEB 14 2005
Returned to applicant for correction MAR 17 2005
Corrected application filed JUL 15 2005
Map filed JUL 15 2005

The applicant **Lincoln County Water District and Vidler Water Company, Inc.** hereby make application for permission to appropriate the public waters of the State of Nevada, as hereinafter stated.

1. The source of the proposed appropriation is **Underground**
2. The amount of water applied for is **6.0 cfs** second-feet
 - (a) If stored in reservoir give number of acre-feet
3. The water to be used for **Municipal**
4. If use is for:
 - (a) Irrigation, state number of acres to be irrigated
 - (b) Stockwater, state number and kinds of animals to be watered
 - (c) Other use (describe fully under No. 12. "Remarks")
 - (d) Power:
 - (1) Horsepower developed
 - (2) Point of return of water to stream
5. The water is to be diverted from its source at the following point **within the SE/4 SW/4, Section 11, T.9S., R.65E., M.D.B.&M. or at a point from which the southeast corner of Section 35, T.8S., R.65E., M.D.B.&M. bears N. 22° 00' 45" E. a distance of 11810.67 feet**
6. Place of Use **Within the Coyote Springs Valley Hydrographic Basin (210) (see attached sheet) Please refer to supporting map filed under Application Number 71722 for the proposed Place of Use.**
7. Use will begin about **January 1** and end about **December 31** of each year.
8. Description of proposed works **a drilled and cased well, equipped with a pump, motor and pipeline to proposed place of use**
9. Estimated cost of works **\$100,000.00**
10. Estimated time required to construct works **5 years**
11. Estimated time required to complete the application of water to beneficial use **10 years**

72221

12. Remarks: Please refer to supporting map filed under Application Number 71722 depicting the proposed Place of Use.

By **Jennifer Morgan s/ Jennifer L. Morgan**
704 W. Nye Lane, Suite 201
Carson City, NV 89703

Compared gkl/sam

Protested 10/14/05 by U.S.D.I. National Park Service & U.S. Fish & Wildlife
Pro. Overruled 2-2-2007 See Ruling #5712

Place of Use Description

Those portions of the following Townships and Ranges lying within the Coyote Springs Valley Hydrographic Basin (210):

Portions of T. 8 S., R. 62 E.
Portions of T. 8 S., R. 63 E.
Portions of T. 8 S., R. 64 E.

Portions of T. 9 S., R. 61 E.
Portions of T. 9 S., R. 62 E.
Portions of T. 9 S., R. 63 E.
Portions of T. 9 S., R. 64 E.

Portions of T. 10 S., R. 61 E.
All of T. 10 S., R. 62 E.
Portions of T. 10 S., R. 63 E.
Portions of T. 10 S., R. 64 E.

Portions of T. 11 S., R. 61 E.
All of T. 11 S., R. 62 E.
Portions of T. 11 S., R. 63 E.
Portions of T. 11 S., R. 64 E.

Portions of T. 12 S., R. 61 E.
All of T. 12 S., R. 62 E.
All of T. 12 S., R. 63 E.
Portions of T. 12 S., R. 64 E.

Portions of T. 12.5 S., R. 61 E.
Portions of T. 12.5 S., R. 62 E.

Portions of T. 13 S., R. 61 E.
All of T. 13 S., R. 62 E.
Portions of T. 13 S., R. 63 E.
Portions of T. 13 S., R. 64 E.

Portions of T. 13.5 S., R. 63 E.

Portions of T. 14 S., R. 61 E.
All of T. 14 S., R. 62 E.
Portions of T. 14 S., R. 63 E.

Portions of T. 15 S., R. 61 E.
Portions of T. 15 S., R. 62 E.
Portions of T. 15 S., R. 63 E.

Portions of T. 16 S., R. 62 E.

Exhibit 8



Permit No. 82727

THE STATE OF NEVADA

PERMIT TO CHANGE THE PUBLIC WATERS OF THE STATE OF NEVADA HERETOFORE APPROPRIATED

Name of Permittee: LINCOLN COUNTY WATER DISTRICT,
COYOTE SPRINGS INVESTMENT, LLC
AND VIDLER WATER COMPANY, INC.

Source: UNDERGROUND

Basin: KANE SPRINGS VALLEY

Manner of Use: MUNICIPAL

Period of Use: JANUARY 1ST THROUGH DECEMBER 31ST

Priority Date: 02/14/2005

APPROVAL OF STATE ENGINEER

This is to certify that I have examined the foregoing application, and do hereby grant the same, subject to the following limitations and conditions:

This permit, to change the point of diversion of the waters of an underground source as heretofore granted under Permit 72218, is issued subject to the terms and conditions imposed in said Permit 72218 and with the understanding that no other rights on the source will be affected by the change proposed herein. The well shall be equipped with a 2-inch opening and a totalizing meter must be installed and maintained in the discharge pipeline near the point of diversion and accurate measurements must be kept of water placed to beneficial use. The totalizing meter must be installed before any use of the water begins or before the proof of completion of work is filed. If the well is flowing, a valve must be installed and maintained to prevent waste. The State retains the right to regulate the use of the water herein granted at any and all times.

Monthly records shall be kept of the amount of water pumped from this well and the records submitted to the State Engineer on a quarterly basis within 30 days after the end of each calendar quarter.

This permit does not extend the permittee the right of ingress and egress on public, private or corporate lands.

The well must be sealed with cement grout, concrete grout or neat cement from ground level to 100 feet.

The total combined duty of water under Permits 82727 and 82728 shall not exceed 500.0 acre-feet annually.

The issuance of this permit does not waive the requirements that the permit holder obtain other permits from State, Federal and local agencies.

This permit is issued subject to State Engineer's Ruling #5712, dated February 2, 2007.

Before any pumping can occur from this well, a monitoring plan must be submitted to and approved by this office.

(Continued on Page 2)

Permit No. 82727

The point of diversion and place of use are as described on the submitted application to support this permit.

The amount of water to be appropriated shall be limited to the amount which can be applied to beneficial use, and not to exceed 6.0 cubic feet per second but not to exceed 500.0 acre-feet annually.

Work must be prosecuted with reasonable diligence and proof of completion of work shall be filed on or before:

August 27 2019

Water must be placed to beneficial use and proof of the application of water to beneficial use shall be filed on or before:

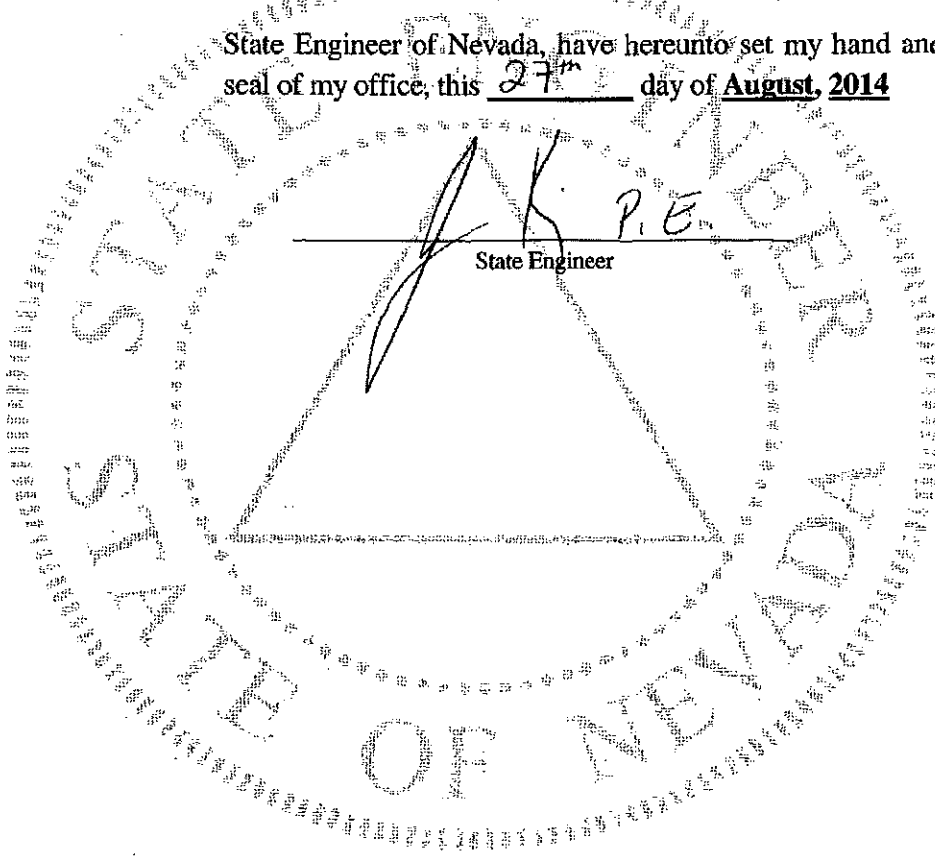
August 27 2024

Map in support of proof of beneficial use shall be filed on or before:

N/A

IN TESTIMONY WHEREOF, I, JASON KING, P.E.,

State Engineer of Nevada, have hereunto set my hand and the seal of my office, this 27th day of August, 2014



Application No. 82727

**APPLICATION FOR PERMISSION TO CHANGE POINT OF DIVERSION, MANNER
OF USE AND PLACE OF USE OF THE PUBLIC WATERS
OF THE STATE OF NEVADA HERETOFORE APPROPRIATED**

THIS SPACE FOR OFFICE USE ONLY

Date of filing in State Engineer's Office APR 17 2013Returned to applicant for correction MAY 01 2013Corrected application filed MAY 06 2013 Map filed APR 17 2013

The applicant Lincoln County Water District, Coyote Springs Investment, LLC and Vidler Water Company, Inc.

P.O. Box 206

of

Pioche

Street Address or PO Box

City or Town

NV, 89043

hereby make(s) application for permission to change the

State and ZIP Code

☒ Point of diversion☐ Place of use☐ Manner of use☐ of a portion

of water heretofore appropriated under (Identify existing rights by Permit, Certificate, Proof or Claim Nos. If Decreed, give title of Decree and identify right in Decree.)

Permit 722181. The source of water is Underground

Name of stream, lake, underground, spring or other sources.

2. The amount of water to be changed 6 cfs., not to exceed 500 acre feet

Second feet, acre-feet. One second foot equals 448.83 gallons per minute.

3. The water to be used for Municipal

Irrigation, power, mining, commercial, etc. If for stock, state number and kind of animals. Must limit to one major use

4. The water heretofore used for Municipal

If for stock, state number and kind of animals.

5. The water is to be diverted at the following point (Describe as being within a 40-acre subdivision of public survey and by course and distance to a found section corner. If on unsurveyed land, it should be stated.)

On unsurveyed ground within the SW 1/4 NW 1/4 Section 14, T.10S., R.64E., M.D.B.&M or a point from which the SW corner of Section 31, T.10S., R.64E., M.D.B.&M. bears S. 49° 42' 53" W., a distance of 29,593 feet.

6. The existing point of diversion is located within (If point of diversion is not changed, do not answer.)

On unsurveyed ground within the SW 1/4 SE 1/4 Section 25, T.8S., R.65E., M.D.B.&M or a point from which the SW corner of Section 36, T.8S., R.65E., M.D.B.&M. bears S. 26° 36' W., a distance of 7338 feet.

Kane Springs Valley
13-206
L1

82727

7. Proposed place of use (Describe by legal subdivisions. If for irrigation, state number of acres to be irrigated.)

No change in the Place of Use. Within the Coyote Springs Valley Hydrographic Basin (210). Please refer to supporting map field under Application #71722 for the Place of Use. See Attached.

8. Existing place of use (Describe by legal subdivisions. If changing place of use and/or manner of use of irrigation permit, describe acreage to be removed from irrigation.)

No change to the existing place of use.

9. Proposed use will be from January 1 to December 31 of each year.
Month and Day Month and Day

10. Existing use permitted from January 1 to December 31 of each year.
Month and Day Month and Day

11. Description of proposed works. (Under the provision of NRS 535.010 you may be required to submit plans and specifications of your diversion or storage works.) (State manner in which water is to be diverted, i.e., diversion structure, ditches, pipes and flumes or drilled well, pump and motor, etc.)

A drilled and cased well, equipped with a pump, motor and pipeline to proposed place of use.

12. Estimated cost of works \$1,000,000.00

13. Estimated time required to construct works 5 years
If well completed, describe well.

14. Estimated time required to complete the application of water to beneficial use 10 years

15. Provide a detailed description of the proposed project and its water usage (use attachments if necessary): (Failure to provide a detailed description may cause a delay in processing.)

A drilled and cased well, equipped with a pump, motor and pipeline to proposed place of use.

16. Miscellaneous remarks:

The change applications for the point of diversion of Permits 72218, 72219 and 72221 is to have the permitted Total Combined Duty in multiple well sites or one well site, production shall not exceed 500 acre feet per year. Please see the attached groundwater flow model report by Dr. Peter Mock, R.G., P.H.,

Emilia.cargill@coyotesprings.com

E-mail Address

925-682-6419

Phone No.

Ext.

APPLICATION MUST BE SIGNED
BY THE APPLICANT OR AGENT

Albert D. Seeno

Type or print name clearly

[Signature]
Signature, applicant or agent

Coyote Springs Investment, LLC

Company Name

3100 State Route 168, PO Box 37010

Street Address or PO Box

Coyote Springs, Nevada 89037

City, State, ZIP Code

7. Place of Use, Description:

Those portions of the following Townships and Ranges lying within the Coyote Springs Valley Hydrographic Basin (210):

Portions of T. 8 S., R. 62 E.
Portions of T. 8 S., R. 63 E.
Portions of T. 8 S., R. 64 E.

Portions of T. 9 S., R. 61 E.
Portions of T. 9 S., R. 62 E.
Portions of T. 9 S., R. 63 E.
Portions of T. 9 S., R. 64 E.

Portions of T. 10 S., R. 61 E.
All of T. 10 S., R. 62 E.
Portions of T. 10 S., R. 63 E.
Portions of T. 10 S., R. 64 E.

Portions of T. 11 S., R. 61 E.
All of T. 11 S., R. 62 E.
Portions of T. 11 S., R. 63 E.
Portions of T. 11 S., R. 64 E.

Portions of T. 12 S., R. 61 E.
All of T. 12 S., R. 62 E.
All of T. 12 S., R. 63 E.
Portions of T. 12 S., R. 64 E.

Portions of T. 12.5 S., R. 61 E.
All of T. 12.5 S., R. 62 E.

Portions of T. 13 S., R. 61 E.
All of T. 13 S., R. 62 E.
Portions of T. 13 S., R. 63 E.
Portions of T. 13 S., R. 64 E.

Portions of T. 13.5 S., R. 63 E.

Portions of T. 14 S., R. 61 E.
All of T. 14 S., R. 62 E.
Portions of T. 14 S., R. 63 E.

Portions of T. 15 S., R. 61 E.
Portions of T. 15 S., R. 62 E.
Portions of T. 15 S., R. 63 E.

Portions of T. 16 S., R. 62 E.

Exhibit 9



Permit No. 82728

THE STATE OF NEVADA

PERMIT TO CHANGE THE PUBLIC WATERS OF THE STATE OF NEVADA HERETOFORE APPROPRIATED

Name of Permittee: LINCOLN COUNTY WATER DISTRICT,
COYOTE SPRINGS INVESTMENT, LLC
AND VIDLER WATER COMPANY, INC.

Source: UNDERGROUND

Basin: KANE SPRINGS VALLEY

Manner of Use: MUNICIPAL

Period of Use: JANUARY 1ST THROUGH DECEMBER 31ST

Priority Date: 02/14/2005

APPROVAL OF STATE ENGINEER

This is to certify that I have examined the foregoing application, and do hereby grant the same, subject to the following limitations and conditions:

This permit, to change the point of diversion of the waters of an underground source as heretofore granted under Permit 72219, is issued subject to the terms and conditions imposed in said Permit 72219 and with the understanding that no other rights on the source will be affected by the change proposed herein. The well shall be equipped with a 2-inch opening and a totalizing meter must be installed and maintained in the discharge pipeline near the point of diversion and accurate measurements must be kept of water placed to beneficial use. The totalizing meter must be installed before any use of the water begins or before the proof of completion of work is filed. If the well is flowing, a valve must be installed and maintained to prevent waste. The State retains the right to regulate the use of the water herein granted at any and all times.

Monthly records shall be kept of the amount of water pumped from this well and the records submitted to the State Engineer on a quarterly basis within 30 days after the end of each calendar quarter.

This permit does not extend the permittee the right of ingress and egress on public, private or corporate lands.

The well must be sealed with cement grout, concrete grout or neat cement from ground level to 100 feet.

The total combined duty of water under Permits 82727 and 82728 shall not exceed 500.0 acre-feet annually.

The issuance of this permit does not waive the requirements that the permit holder obtain other permits from State, Federal and local agencies.

This permit is issued subject to State Engineer's Ruling #5712, dated February 2, 2007.

Before any pumping can occur from this well, a monitoring plan must be submitted to and approved by this office.

(Continued on Page 2)

Permit No. 82728

The point of diversion and place of use are as described on the submitted application to support this permit.

The amount of water to be appropriated shall be limited to the amount which can be applied to beneficial use, **and not to exceed 6.0 cubic feet per second but not to exceed 500.0 acre-feet annually.**

Work must be prosecuted with reasonable diligence and proof of completion of work shall be filed on or before:

August 27 2019

Water must be placed to beneficial use and proof of the application of water to beneficial use shall be filed on or before:

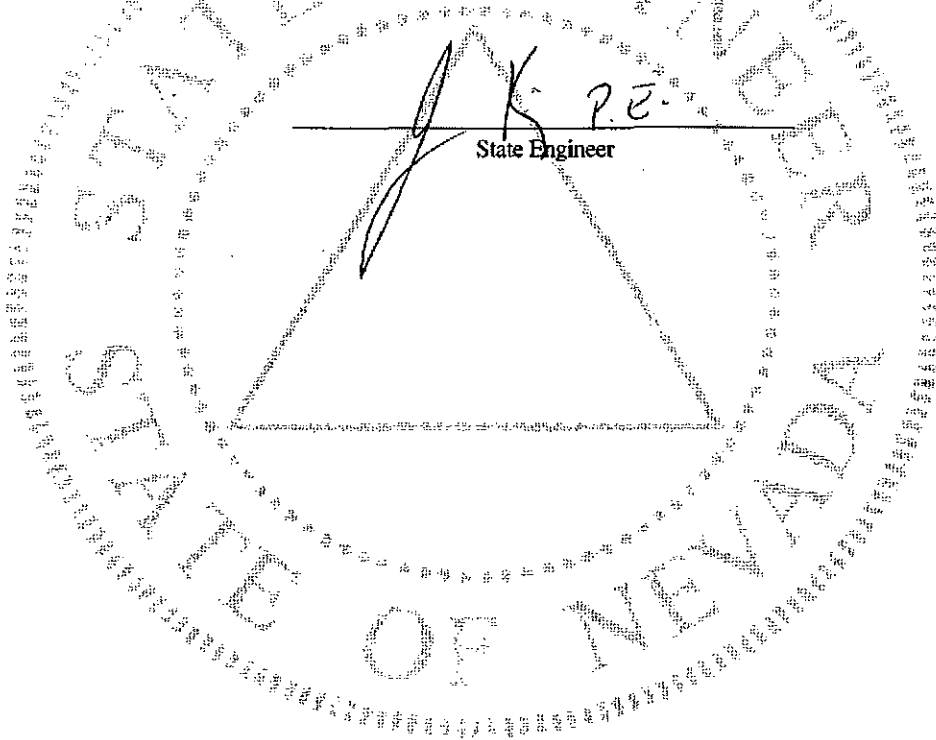
August 27 2024

Map in support of proof of beneficial use shall be filed on or before:

N/A

IN TESTIMONY WHEREOF, I, JASON KING, P.E.,

State Engineer of Nevada, have hereunto set my hand and the seal of my office, this 27th day of August, 2014



Application No. **82728**

**APPLICATION FOR PERMISSION TO CHANGE POINT OF DIVERSION, MANNER
OF USE AND PLACE OF USE OF THE PUBLIC WATERS
OF THE STATE OF NEVADA HERETOFORE APPROPRIATED**

| | |
|---|--------------------------------|
| THIS SPACE FOR OFFICE USE ONLY | |
| Date of filing in State Engineer's Office | <u>APR 17 2013</u> |
| Returned to applicant for correction | <u>MAY 01 2013</u> |
| Corrected application filed | <u>MAY 06 2013</u> |
| Map filed | <u>APR 17 2013 under 82727</u> |

The applicant Lincoln County Water District, Coyote Springs Investment, LLC and Vidler Water Company, Inc.

P.O. Box 206 of Pioche
Street Address or PO Box City or Town
NV, 89043 hereby make(s) application for permission to change the
State and ZIP Code

☒ Point of diversion ☐ Place of use ☐ Manner of use ☐ of a portion

of water heretofore appropriated under (Identify existing rights by Permit, Certificate, Proof or Claim Nos. If Decreed, give title of Decree and identify right in Decree.)

Permit 72219

- The source of water is Underground
Name of stream, lake, underground, spring or other sources.
- The amount of water to be changed 6 cfs., not to exceed 500 acre feet
Second feet, acre-feet. One second foot equals 448.83 gallons per minute.
- The water to be used for Municipal
Irrigation, power, mining, commercial, etc. If for stock, state number and kind of animals. Must limit to one major use
- The water heretofore used for Municipal
If for stock, state number and kind of animals.
- The water is to be diverted at the following point (Describe as being within a 40-acre subdivision of public survey and by course and distance to a found section corner. If on unsurveyed land, it should be stated.)
On unsurveyed ground within the NE¼ NW¼ Section 28, T.10S., R.64E., M.D.B.&M or a point from which the SW corner of Section 31, T.10S., R.64E., M.D.B.&M. bears S. 54° 1' 58" W., a distance of 16,201 feet.
- The existing point of diversion is located within (If point of diversion is not changed, do not answer.)
On unsurveyed ground within the SE¼ SW¼ Section 31, T.9S., R.65E., M.D.B.&M or a point from which the SW corner of Section 35, T.8S., R.65E., M.D.B.&M. bears N. 32° 24' E., a distance of 37,144 feet.

*Kane Springs Valley
13 - 206
L1*

82728

7. Proposed place of use (Describe by legal subdivisions. If for irrigation, state number of acres to be irrigated.)

No change in the Place of Use. Within the Coyote Springs Valley Hydrographic Basin (210). Please refer to supporting map field under Application #71722 for the Place of Use. See Attached.

8. Existing place of use (Describe by legal subdivisions. If changing place of use and/or manner of use of irrigation permit, describe acreage to be removed from irrigation.)

No change to the existing place of use

9. Proposed use will be from January 1 to December 31 of each year.
Month and Day Month and Day

10. Existing use permitted from January 1 to December 31 of each year.
Month and Day Month and Day

11. Description of proposed works. (Under the provision of NRS 535.010 you may be required to submit plans and specifications of your diversion or storage works.) (State manner in which water is to be diverted, i.e., diversion structure, ditches, pipes and flumes or drilled well, pump and motor, etc.)

A drilled and cased well, equipped with a pump, motor and pipeline to proposed place of use.

12. Estimated cost of works \$1,000,000.00

13. Estimated time required to construct works 5 years

If well completed, describe well.

14. Estimated time required to complete the application of water to beneficial use 10 years

15. Provide a detailed description of the proposed project and its water usage (use attachments if necessary): (Failure to provide a detailed description may cause a delay in processing.)

A drilled and cased well, equipped with a pump, motor and pipeline to proposed place of use.

16. Miscellaneous remarks:

The change applications for the point of diversion of Permits 72218, 72219 and 72221 is to have the permitted Total Combined Duty in multiple well sites or one well site, production shall not exceed 500 acre feet per year. Please see the attached groundwater flow model report by Dr. Peter Mock, R.G., P.H.,

emilia.cargill@coyotesprings.com

E-mail Address

925-682-6419

Phone No.

Ext.

APPLICATION MUST BE SIGNED
BY THE APPLICANT OR AGENT

Albert D. Seeno

Type or print name clearly

Signature, applicant or agent

Coyote Springs Investment, LLC

Company Name

3100 State Route 168, PO Box 37010

Street Address or PO Box

Coyote Springs, Nevada 89037

City, State, ZIP Code

7. Place of Use, Description:

Those portions of the following Townships and Ranges lying within the Coyote Springs Valley Hydrographic Basin (210):

Portions of T. 8 S., R. 62 E.
Portions of T. 8 S., R. 63 E.
Portions of T. 8 S., R. 64 E.

Portions of T. 9 S., R. 61 E.
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Portions of T. 9 S., R. 63 E.
Portions of T. 9 S., R. 64 E.

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All of T. 10 S., R. 62 E.
Portions of T. 10 S., R. 63 E.
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Portions of T. 11 S., R. 61 E.
All of T. 11 S., R. 62 E.
Portions of T. 11 S., R. 63 E.
Portions of T. 11 S., R. 64 E.

Portions of T. 12 S., R. 61 E.
All of T. 12 S., R. 62 E.
All of T. 12 S., R. 63 E.
Portions of T. 12 S., R. 64 E.

Portions of T. 12.5 S., R. 61 E.
All of T. 12.5 S., R. 62 E.

Portions of T. 13 S., R. 61 E.
All of T. 13 S., R. 62 E.
Portions of T. 13 S., R. 63 E.
Portions of T. 13 S., R. 64 E.

Portions of T. 13.5 S., R. 63 E.

Portions of T. 14 S., R. 61 E.
All of T. 14 S., R. 62 E.
Portions of T. 14 S., R. 63 E.

Portions of T. 15 S., R. 61 E.
Portions of T. 15 S., R. 62 E.
Portions of T. 15 S., R. 63 E.

Portions of T. 16 S., R. 62 E.

Exhibit 10

No. 74147

**APPLICATION FOR PERMIT
TO APPROPRIATE THE PUBLIC WATERS OF THE STATE OF NEVADA**

Date of filing in State Engineer's Office APR 10 2006

Returned to applicant for correction _____

Corrected application filed _____

Map filed APR 05 1999 under 64688

The applicant **Lincoln County Water District and Vidler Water Company, Inc.** hereby make application for permission to appropriate the public waters of the State of Nevada, as hereinafter stated. **Vidler Water Company, Inc.** is a Nevada Corporation, 05/18/04

1. The source of the proposed appropriation is **Underground**
2. The amount of water applied for is **6.0 cfs** second-feet
 - (a) If stored in reservoir give number of acre-feet
3. The water to be used for **Municipal**
4. If use is for:
 - (a) Irrigation, state number of acres to be irrigated
 - (b) Stockwater, state number and kinds of animals to be watered
 - (c) Other use (describe fully under No. 12. "Remarks")
 - (d) Power:
 - (1) Horsepower developed
 - (2) Point of return of water to stream
5. The water is to be diverted from its source at the following point **On unsurveyed ground within the SW¼ SE¼ Sec. 25, T. 8 S., R. 65 E., M.D.B. & M., or at a point from which the SW ¼ corner of Section 36, T. 8 S., R. 65 E., M.D.B. & M. bears S. 26° 26' W., a distance of 7338 feet Please refer to supporting map filed under Application Number 64688 depicting the proposed Point of Diversion.**
6. Place of Use **Within the Coyote Springs Valley Hydrographic Basin (210) (see attached sheet) Please refer to supporting map filed under Application Number 71722 for the proposed Place of Use.**
7. Use will begin about **January 1** and end about **December 31** of each year.
8. Description of proposed works **a drilled and cased well, equipped with a pump, motor and pipeline to proposed place of use**
9. Estimated cost of works **\$100,000.00**
10. Estimated time required to construct works **5 years**
11. Estimated time required to complete the application of water to beneficial use **10 years**

No. 74147

12. Remarks: Please refer to supporting map filed under Application Number 64688 depicting the proposed Point of Diversion. Please refer to supporting map filed under Application Number 71722 depicting the proposed Place of Use.

By Jennifer Morgan s/ Jennifer Morgan
704 W. Nye Lane, Suite 201
Carson City, NV 89703

Compared sg/gkl

Protested 6/8/2006 by USDI National Park Service, 6/12/2006 by Moapa Band of Painte Indians and 6/15/2006 by USDI Bureau of Indian Affairs

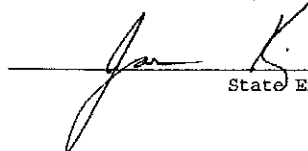
DENIAL OF STATE ENGINEER

This application is hereby denied on the grounds there is no unappropriated water in the source and to grant additional water rights would conflict with existing rights and threaten to prove detrimental to the public interest. No ruling is made on the merits of the protests.

IN TESTIMONY WHEREOF, I, TRACY TAYLOR, P.E.,

State Engineer of Nevada, have hereunto set
my hand and the seal of my office,

this 29th day of April, A.D. 2009



State Engineer

Place of Use Description

Those portions of the following Townships and Ranges lying within the Coyote Springs Valley Hydrographic Basin (210):

Portions of T. 8 S., R. 62 E.
Portions of T. 8 S., R. 63 E.
Portions of T. 8 S., R. 64 E.

Portions of T. 9 S., R. 61 E.
Portions of T. 9 S., R. 62 E.
Portions of T. 9 S., R. 63 E.
Portions of T. 9 S., R. 64 E.

Portions of T. 10 S., R. 61 E.
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Portions of T. 12.5 S., R. 61 E.
Portions of T. 12.5 S., R. 62 E.

Portions of T. 13 S., R. 61 E.
All of T. 13 S., R. 62 E.
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Portions of T. 13.5 S., R. 63 E.

Portions of T. 14 S., R. 61 E.
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Portions of T. 14 S., R. 63 E.

Portions of T. 15 S., R. 61 E.
Portions of T. 15 S., R. 62 E.
Portions of T. 15 S., R. 63 E.

Portions of T. 16 S., R. 62 E.

Exhibit 11

No. 74148

APPLICATION FOR PERMIT
TO APPROPRIATE THE PUBLIC WATERS OF THE STATE OF NEVADA

Date of filing in State Engineer's Office APR 10 2006

Returned to applicant for correction _____

Corrected application filed _____

Map filed APR 05 1999 under 64688

The applicant **Lincoln County Water District and Vidler Water Company, Inc.** hereby make application for permission to appropriate the public waters of the State of Nevada, as hereinafter stated. **Vidler Water Company, Inc.** is a Nevada Corporation, 05/18/04

1. The source of the proposed appropriation is **Underground**
2. The amount of water applied for is **6.0 cfs** second-feet
 - (a) If stored in reservoir give number of acre-feet
3. The water to be used for **Municipal**
4. If use is for:
 - (a) Irrigation, state number of acres to be irrigated
 - (b) Stockwater, state number and kinds of animals to be watered
 - (c) Other use (describe fully under No. 12. "Remarks")
 - (d) Power:
 - (1) Horsepower developed
 - (2) Point of return of water to stream
5. The water is to be diverted from its source at the following point **On unsurveyed ground within the SE¼ SW¼ Sec. 31, T. 9 S., R. 65 E., M.D.B. & M., or at a point from which the SW ¼ corner of Section 35, T. 8 S., R. 65 E., M.D.B. & M. bears N. 32° 24' E., a distance of 37,144 feet Please refer to supporting map filed under Application Number 64688 depicting the proposed Point of Diversion.**
6. Place of Use **Within the Coyote Springs Valley Hydrographic Basin (210) (see attached sheet) Please refer to supporting map filed under Application Number 71722 for the proposed Place of Use.**
7. Use will begin about **January 1** and end about **December 31** of each year.
8. Description of proposed works **a drilled and cased well, equipped with a pump, motor and pipeline to proposed place of use**
9. Estimated cost of works **\$100,000.00**
10. Estimated time required to construct works **5 years**
11. Estimated time required to complete the application of water to beneficial use **10 years**

No. 74148

12. Remarks: Please refer to supporting map filed under Application Number 64688 depicting the proposed Point of Diversion. Please refer to supporting map filed under Application Number 71722 depicting the proposed Place of Use.

By Jennifer Morgan s/ Jennifer Morgan
704 W. Nye Lane, Suite 201
Carson City, NV 89703

Compared sg/gkl

Protested 6/8/2006 by USDI National Park Service, 6/12/2006 by Moapa Band of Paiute Indians and 6/15/2006 by USDI Bureau of Indian Affairs

DENIAL OF STATE ENGINEER

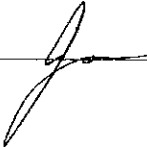
This application is hereby denied on the grounds there is no unappropriated water in the source and to grant additional water rights would conflict with existing rights and threaten to prove detrimental to the public interest. No ruling is made on the merits of the protests.

IN TESTIMONY WHEREOF, I, TRACY TAYLOR, P.E.,

State Engineer of Nevada, have hereunto set

my hand and the seal of my office,

this 29th day of April, A.D. 2009

 P.E.
State Engineer

Place of Use Description

Those portions of the following Townships and Ranges lying within the Coyote Springs Valley Hydrographic Basin (210):

Portions of T. 8 S., R. 62 E.
Portions of T. 8 S., R. 63 E.
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All of T. 13 S., R. 62 E.
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Portions of T. 13.5 S., R. 63 E.

Portions of T. 14 S., R. 61 E.
All of T. 14 S., R. 62 E.
Portions of T. 14 S., R. 63 E.

Portions of T. 15 S., R. 61 E.
Portions of T. 15 S., R. 62 E.
Portions of T. 15 S., R. 63 E.

Portions of T. 16 S., R. 62 E.

Exhibit 12

No. 74149

APPLICATION FOR PERMIT
TO APPROPRIATE THE PUBLIC WATERS OF THE STATE OF NEVADA

Date of filing in State Engineer's Office APR 10 2006

Returned to applicant for correction _____

Corrected application filed _____

Map filed JUL 15 2005 under 72220

The applicant **Lincoln County Water District and Vidler Water Company, Inc.** hereby make application for permission to appropriate the public waters of the State of Nevada, as hereinafter stated. **Vidler Water Company, Inc.** is a Nevada Corporation, 05/18/04

1. The source of the proposed appropriation is **Underground**
2. The amount of water applied for is **6.0 cfs** second-feet
 - (a) If stored in reservoir give number of acre-feet
3. The water to be used for **Municipal**
4. If use is for:
 - (a) Irrigation, state number of acres to be irrigated
 - (b) Stockwater, state number and kinds of animals to be watered
 - (c) Other use (describe fully under No. 12. "Remarks")
 - (d) Power:
 - (1) Horsepower developed
 - (2) Point of return of water to stream
5. The water is to be diverted from its source at the following point **Within the SE ¼ SW ¼ Sec. 6, T. 11 S., R. 64 E., M.D.B. & M., or at a point from which the NW corner of said Section 6 bears N. 20° 29' 42" W., a distance of 4024.25 feet Please refer to supporting map filed under Application Number 72220 depicting the proposed Point of Diversion.**
6. Place of Use **Within Coyote Springs Valley Hydrographic Basin (210) (see attached sheet) Please refer to supporting map filed under Application Number 71722 for the proposed Place of Use.**
7. Use will begin about **January 1** and end about **December 31** of each year.
8. Description of proposed works **a drilled and cased well, equipped with a pump, motor and pipeline to proposed place of use**
9. Estimated cost of works **\$100,000.00**
10. Estimated time required to construct works **5 years**
11. Estimated time required to complete the application of water to beneficial use **10 years**

No. 74149

12. Remarks: Please refer to supporting map filed under Application Number 72220 depicting the proposed Point of Diversion. Please refer to supporting map filed under Application Number 71722 depicting the proposed Place of Use.

By Jennifer Morgan s/ Jennifer Morgan
704 W. Nye Lane, Suite 201
Carson City, NV 89703

Compared sg/gkl

Protested 6/8/2006 by USDI National Park Service, 6/12/2006 by Moapa Band of Paiute Indians and 6/15/2006 by USDI Bureau of Indian Affairs

DENIAL OF STATE ENGINEER

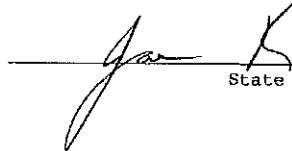
This application is hereby denied on the grounds there is no unappropriated water in the source and to grant additional water rights would conflict with existing rights and threaten to prove detrimental to the public interest. No ruling is made on the merits of the protests.

IN TESTIMONY WHEREOF, I, TRACY TAYLOR, P.E.,

State Engineer of Nevada, have hereunto set

my hand and the seal of my office,

this 29th day of April, A.D. 2009

 P.E.
State Engineer

Place of Use Description

Those portions of the following Townships and Ranges lying within the Coyote Springs Valley Hydrographic Basin (210):

Portions of T. 8 S., R. 62 E.
Portions of T. 8 S., R. 63 E.
Portions of T. 8 S., R. 64 E.

Portions of T. 9 S., R. 61 E.
Portions of T. 9 S., R. 62 E.
Portions of T. 9 S., R. 63 E.
Portions of T. 9 S., R. 64 E.

Portions of T. 10 S., R. 61 E.
All of T. 10 S., R. 62 E.
Portions of T. 10 S., R. 63 E.
Portions of T. 10 S., R. 64 E.

Portions of T. 11 S., R. 61 E.
All of T. 11 S., R. 62 E.
Portions of T. 11 S., R. 63 E.
Portions of T. 11 S., R. 64 E.

Portions of T. 12 S., R. 61 E.
All of T. 12 S., R. 62 E.
All of T. 12 S., R. 63 E.
Portions of T. 12 S., R. 64 E.

Portions of T. 12.5 S., R. 61 E.
Portions of T. 12.5 S., R. 62 E.

Portions of T. 13 S., R. 61 E.
All of T. 13 S., R. 62 E.
Portions of T. 13 S., R. 63 E.
Portions of T. 13 S., R. 64 E.

Portions of T. 13.5 S., R. 63 E.

Portions of T. 14 S., R. 61 E.
All of T. 14 S., R. 62 E.
Portions of T. 14 S., R. 63 E.

Portions of T. 15 S., R. 61 E.
Portions of T. 15 S., R. 62 E.
Portions of T. 15 S., R. 63 E.

Portions of T. 16 S., R. 62 E.

Exhibit 13

No. 74150

**APPLICATION FOR PERMIT
TO APPROPRIATE THE PUBLIC WATERS OF THE STATE OF NEVADA**

Date of filing in State Engineer's Office APR 10 2006

Returned to applicant for correction _____

Corrected application filed _____

Map filed JUL 15 2005 under 72221

The applicant **Lincoln County Water District and Vidler Water Company, Inc.** hereby make application for permission to appropriate the public waters of the State of Nevada, as hereinafter stated. **Vidler Water Company, Inc. is a Nevada Corporation, 05/18/04**

1. The source of the proposed appropriation is **Underground**
2. The amount of water applied for is **6.0 cfs** second-feet
 - (a) If stored in reservoir give number of acre-feet
3. The water to be used for **Municipal**
4. If use is for:
 - (a) Irrigation, state number of acres to be irrigated
 - (b) Stockwater, state number and kinds of animals to be watered
 - (c) Other use (describe fully under No. 12. "Remarks")
 - (d) Power:
 - (1) Horsepower developed
 - (2) Point of return of water to stream
5. The water is to be diverted from its source at the following point **Within the SE ¼ SW ¼ Sec. 11, T. 9 S., R. 65 E., M.D.B. & M., or at a point from which the SE corner of said Section 35, T. 8 S., R. 65 E bears N. 22° 00' 45" E., a distance of 11810.67 feet Please refer to supporting map filed under Application Number 72221 depicting the proposed Point of diversion.**
6. Place of Use **Within the Coyote Springs Valley Hydrographic Basin (210) (see attached sheet) Please refer to supporting map filed under Application Number 71722 for the proposed Place of Use.**
7. Use will begin about **January 1** and end about **December 31** of each year.
8. Description of proposed works **a drilled and cased well, equipped with a pump, motor and pipeline to proposed place of use**
9. Estimated cost of works **\$100,000.00**
10. Estimated time required to construct works **5 years**
11. Estimated time required to complete the application of water to beneficial use **10 years**

No. 74150

12. Remarks: Please refer to supporting map filed under Application Number 72221 depicting the proposed Point of Diversion. Please refer to supporting map filed under Application Number 71722 depicting the proposed Place of Use.

By Jennifer Morgan s/ Jennifer Morgan
704 W. Nye Lane, Suite 201
Carson City, NV 89703

Compared sg/gkl

Protested 6/8/2006 by USDI National Park Service, 6/12/2006 by Moapa Band of Paiute Indians and 6/15/2006 by USDI Bureau of Indian Affairs

DENIAL OF STATE ENGINEER

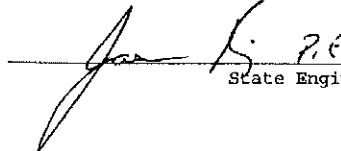
This application is hereby denied on the grounds there is no unappropriated water in the source and to grant additional water rights would conflict with existing rights and threaten to prove detrimental to the public interest. No ruling is made on the merits of the protests.

IN TESTIMONY WHEREOF, I, TRACY TAYLOR, P.E.,

State Engineer of Nevada, have hereunto set

my hand and the seal of my office,

this 29th day of April, A.D. 2009



State Engineer

Place of Use Description

Those portions of the following Townships and Ranges lying within the Coyote Springs Valley Hydrographic Basin (210):

Portions of T. 8 S., R. 62 E.
Portions of T. 8 S., R. 63 E.
Portions of T. 8 S., R. 64 E.

Portions of T. 9 S., R. 61 E.
Portions of T. 9 S., R. 62 E.
Portions of T. 9 S., R. 63 E.
Portions of T. 9 S., R. 64 E.

Portions of T. 10 S., R. 61 E.
All of T. 10 S., R. 62 E.
Portions of T. 10 S., R. 63 E.
Portions of T. 10 S., R. 64 E.

Portions of T. 11 S., R. 61 E.
All of T. 11 S., R. 62 E.
Portions of T. 11 S., R. 63 E.
Portions of T. 11 S., R. 64 E.

Portions of T. 12 S., R. 61 E.
All of T. 12 S., R. 62 E.
All of T. 12 S., R. 63 E.
Portions of T. 12 S., R. 64 E.

Portions of T. 12.5 S., R. 61 E.
Portions of T. 12.5 S., R. 62 E.

Portions of T. 13 S., R. 61 E.
All of T. 13 S., R. 62 E.
Portions of T. 13 S., R. 63 E.
Portions of T. 13 S., R. 64 E.

Portions of T. 13.5 S., R. 63 E.

Portions of T. 14 S., R. 61 E.
All of T. 14 S., R. 62 E.
Portions of T. 14 S., R. 63 E.

Portions of T. 15 S., R. 61 E.
Portions of T. 15 S., R. 62 E.
Portions of T. 15 S., R. 63 E.

Portions of T. 16 S., R. 62 E.

Exhibit 14

IN THE OFFICE OF THE STATE ENGINEER
OF THE STATE OF NEVADA

IN THE MATTER OF APPLICATIONS 74147,)
74148, 74149, AND 74150 FILED TO)
APPROPRIATE THE UNDERGROUND)
WATERS OF THE KANE SPRINGS VALLEY)
HYDROGRAPHIC BASIN (206), LINCOLN)
COUNTY, NEVADA.)

RULING
#5987

GENERAL

I.

Application 74147 was filed on April 10, 2006, by the Lincoln County Water District and Vidler Water Company, Inc., to appropriate 6.0 cubic feet per second (cfs) of water from an underground source within the Kane Springs Valley Hydrographic Basin for municipal purposes within the Coyote Spring Valley Hydrographic Basin more specifically described as portions of T.8S., R.62E., T.8S., R.63E., T.8S., R.64E., T.9S., R.61E., T.9S., R.62E., T.9S., T.63E., T.9S., R.64E., T.10S., R.61E., all of T.10S., R.62E., portions of T.10S., R.63E., T.10S., R.64E., T.11S., R.61E., all of T.11S., R.62E., portions of T.11S., R.63E., T.11S., R.64E., T.12S., R.61E., all of T.12S., R.62E., all of T.12S., R.63E., portions of T.12S., R.64E., T.12.5S., R.61E., T.12.5S., R.62E., T.13S., R.61E., all of T.13S., R.62E., portions of T.13S., R.63E., T.13S., R.64E., T.13.5S., R.63E., T.14S., R.61E., all of T.14S., R.62E., portions of T.14S., R.63E., T.15S., R.61E., T.15S., R.62E., T.15S., R.63E., T.16S., R.62E., M.D.B.&M. The proposed point of diversion is described as being located in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 25, T.8S., R.65E., M.D.B.&M.¹

II.

Application 74148 was filed on April 10, 2006, by the Lincoln County Water District and Vidler Water Company, Inc., to appropriate 6.0 cfs of water from an underground source within the Kane Springs Valley Hydrographic Basin for municipal purposes within Coyote Spring Valley Hydrographic Basin as more specifically described above. The proposed point of diversion is described as being located in the SE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 31, T.9S., R.65E., M.D.B.&M.²

¹ File No. 74147, official records in the Office of the State Engineer.

² File No. 74148, official records in the Office of the State Engineer.

Ruling
Page 2

III.

Application 74149 was filed on April 10, 2006, by the Lincoln County Water District and Vidler Water Company, Inc., to appropriate 6.0 cfs of water from an underground source within the Kane Springs Valley Hydrographic Basin for municipal purposes within Coyote Spring Valley Hydrographic Basin as more specifically described in Section I of this ruling. The proposed point of diversion is described as being located in the SE¼ SW¼ of Section 6, T.11S., R.64E., M.D.B.&M.³

IV.

Application 74150 was filed on April 10, 2006, by Lincoln County Water District and Vidler Water Company, Inc., to appropriate 6.0 cfs of water from an underground source within the Kane Springs Valley Hydrographic Basin for municipal purposes within Coyote Spring Valley Hydrographic Basin more specifically as described in Section I of this ruling. The proposed point of diversion is described as being located in the SE¼ SW¼ of Section 11, T.9S., R.65E., M.D.B.&M.⁴

V.

Applications 74147, 74148, 74149 and 74150 were timely protested by the United States Department of Interior, Bureau of Indian Affairs, the Moapa Band of Paiute Indians and the United States Department of Interior, National Park Service on various grounds as summarized below.^{1,2,3,4}

The Bureau of Indians Affairs alleges that the proposed diversions will impact the water rights of the Moapa Band of Paiute Indians and other state-based water rights, there is no unappropriated water in the Kane Springs Valley Hydrographic Basin and the proposed applications could adversely affect the implementation and success of a Memorandum of Agreement with the United States Fish and Wildlife Service, Coyote Springs Investment, LLC, the Moapa Valley Water District and the Southern Nevada Water Authority designed to protect the Muddy River Springs environment and other regional water resources.

The Moapa Band of Paiute Indians protested the applications on the grounds that there is no unappropriated water in the source of supply, the proposed withdrawals would conflict with

³ File No. 74149, official records in the Office of the State Engineer.

⁴ File No. 74150, official records in the Office of the State Engineer.

Ruling
Page 3

existing rights, especially those of the Tribe, the proposed withdrawals would threaten to prove detrimental to the public interest, the proposed withdrawals would be inconsistent and subvert the Applicants' Stipulation to limit ground-water withdrawals under Permits 72218 through 72221, the proposed withdrawals would undermine the efficacy of the critically important Memorandum of Understanding recently entered into by the United States Fish and Wildlife Service, the Southern Nevada Water Authority, Coyote Springs Investment, LLC, the Moapa Valley Water District and the Tribe to maintain Muddy Springs flows to protect the endangered Moapa Dace.

The National Park Service protested the applications on the grounds that there is no water available for appropriation because the committed water resources exceed the ground-water recharge, the approval and development of the proposed appropriations will impair the water rights of the United States and the public interest would not be served by diminishing or impairing the water-related resources in the Lake Mead National Recreation Area.

FINDINGS OF FACT

I.

In State Engineer's Ruling No. 5712, dated February 2, 2007, the State Engineer addressed applications filed by these same Applicants to appropriate ground water from the Kane Springs Valley Hydrographic Basin.⁵ In that ruling, the State Engineer addressed the Applicants' argument regarding ground water availability in the Kane Springs Valley Hydrographic Basin and rejected the Applicants' argument and evidence for the appropriation of ground water above the quantity granted in that ruling. The State Engineer finds that with the issuance of State Engineer's Ruling No. 5712, there is no additional water available for appropriation in the Kane Springs Valley Hydrographic Basin.

CONCLUSIONS

I.

The State Engineer has jurisdiction over the parties and the subject matter of this action and determination.⁶

⁵ State Engineer's Ruling No. 5712, dated February 2, 2007, official records in the Office of the State Engineer.

⁶ NRS chapters 533 and 534.

Ruling
Page 4

II.

The State Engineer is prohibited by law from granting a permit to appropriate the public waters where:⁷

- A. there is no unappropriated water at the proposed source;
- B. the proposed use or change conflicts with existing rights;
- C. the proposed use or change conflicts with protectible interests in existing domestic wells as set forth in NRS § 533.024; or
- D. the proposed use or change threatens to prove detrimental to the public interest.

III.

The State Engineer concludes that there is no additional ground water available for appropriation in the Kane Springs Valley Hydrographic Basin; therefore, the granting of any appropriation under Applications 74147, 74148, 74149 or 74150 would conflict with existing rights and thus threaten to prove detrimental to the public interest.

RULING

Applications 74147, 74148, 74149 and 74150 are hereby denied on the grounds there is no unappropriated water in the source and to grant additional water rights would conflict with existing rights and threaten to prove detrimental to the public interest. No ruling is made on the merits of the protests.

Respectfully submitted,

 P.E.
TRACY TAYLOR, P.E.
State Engineer

TT /jm

Dated this 29th day of
April, 2009.

⁷ NRS 533.370(5).

Exhibit 15

**SETTLEMENT AGREEMENT AMONG THE STATE ENGINEER, STATE OF
NEVADA, JASON KING, P.E., ACTING NEVADA STATE ENGINEER, LINCOLN
COUNTY WATER DISTRICT AND VIDLER WATER COMPANY**

(KANE SPRINGS AGREEMENT)

Lincoln County Water District (the "District"), Vidler Water Company ("Vidler"), the State Engineer, State of Nevada, Jason King, P.E., Acting Nevada State Engineer; (collectively, the "State Engineer") enter into the following Settlement Agreement and Mutual Release ("Agreement," "Settlement Agreement," or "Kane Springs Agreement") this 1st of April, 2010. The parties shall be referred to individually as "Party" and collectively as "Parties."

RECITALS

1. The District and Vidler previously filed Applications 74147, 74148, 74149, and 74150 for the appropriation of water in Kane Springs Valley Hydrographic Basin (the "Kane Springs Applications").
2. The District and Vidler met with State Engineer Tracy Taylor on March 15, 2007, regarding the Kane Springs Applications. The District and Vidler requested that they be allowed to continue the study of the Kane Springs Valley Hydrographic Basin and perform additional data collection and testing in support of the Kane Springs Applications. No written documentation of this agreement was drafted or entered into the application files.
3. After consultation and agreement with the State Engineer, the District and Vidler began to gather precipitation data and other related data to determine the recharge of the Kane Springs Valley Hydrographic Basin. This work remains ongoing.
4. On April 29, 2009, State Engineer's Ruling No. 5987 was issued denying the Kane Springs Applications.
5. The Parties agree that the denial of the Kane Springs Applications was in contradiction of the unwritten agreement and should be corrected.

6. The Parties are entering into a separate settlement agreement ("Tule Desert Agreement") concerning applications that Lincoln and Vidler have in the Tule Desert Groundwater Basin. The Tule Desert Agreement resolves Case No. CV-0518009 entitled *Lincoln County Water District and Vidler Water Company v. State Engineer, State of Nevada* filed by the District and Vidler in the Seventh Judicial District Court of the State of Nevada, in and for the County of Lincoln and Case No. CV00392-LRH-VPC entitled *Lincoln County Water District and Vidler Water Company v. Tracy Taylor, P.E. and Jason King, P.E.* filed in the United States District Court for the District of Nevada in Case No. CV00392-LRH-VPC.

7. This Kane Springs Agreement is the separate settlement agreement referenced in Section IV of the Tule Desert Agreement.

AGREEMENT

In consideration of the mutual promises, duties, and agreements set forth below, the Parties agree as follows:

I. Studies Under N.R.S. § 533.368 and the Use of Third Party Technical Consultants.

The Parties incorporate Section III of the Tule Desert Agreement into this Agreement by this reference, and agree that the terms of Section III of the Tule Desert Agreement shall apply to the State Engineer's review and determination regarding the Kane Springs Applications.

II. Reinstatement of the Kane Springs Applications to Appropriate Groundwater by Lincoln County Water District and Vidler Water Company in the Kane Springs Valley Hydrographic Basin.

A. The State Engineer shall reinstate the Kane Springs Applications and return them to application status with the same priority as under the original filing in the records of the Nevada Division of Water Resources.

B. The State Engineer shall allow the District and Vidler to continue with the study of Kane Springs Valley Hydrographic Basin to gather additional information to more accurately determine the water available to appropriate under NRS 533.370.

1. The State Engineer, the District, and Vidler shall meet annually to review the data submitted by the District and Vidler. The third party Reviewing Consultant (as described in Section III of the Tule Desert Agreement) shall participate in these meetings. The State Engineer shall apply the provisions of Section III of the Tule Desert Agreement in setting criteria and in determining and in identifying necessary studies.
2. The District, Vidler, and the State Engineer agree that Daniel B. Stephens and Peter Mock shall serve as the Study Consultants (as described in Section III of the Tule Desert Agreement) for the Kane Springs Applications.

III. Ratification by Lincoln County Water District.

The parties recognize that this Settlement Agreement needs ratification by Lincoln County Water District's Board of Trustees. The representatives of both the State Engineer and Vidler are authorized to enter into this Settlement Agreement.

IV. Dismissal of Actions.

Upon full execution of the Settlement Agreements containing the terms herein contained and ratification by Lincoln County Water District's Board of Trustees, the State Engineer shall reinstate the Kane Springs Applications to their original priority date, and the Parties shall stipulate to vacate Ruling No. 5987 and to dismiss the state district court appeal of State Engineer's Ruling No. 5987, more specifically identified as *Lincoln County Water District and*

Vidler Water Company v. State Engineer, Case No.CV0519009, filed in the 7th Judicial District Court in and for the State of Nevada, with each party to bear its own costs and attorneys' fees.

V. **Extensions of Time.**

This Agreement shall not affect or limit the State Engineer's discretion in considering any applications for extensions of time for the filing of proof of completion of work, proofs of beneficial use, or to avoid forfeiture. Any requests for extension of time shall be addressed under controlling provisions of law.

VI. **No Precedential Effect.**

The State Engineer enters into this Agreement because of the unique factual circumstances surrounding this case. Aside from the rights and responsibilities established in this Agreement, the Agreement has no precedential effect in any proceeding involving these Parties or any other parties and may not be relied upon as evidence of policy or practices of the State Engineer; provided, however, that the provisions of Section III of the Tule Desert Agreement incorporated by reference in Section I, above, may be relied upon and control the processing of applications as set forth in the provisions of Section III of the Tule Desert Agreement. This Agreement does not limit the State Engineer's authority or discretion as it relates to consideration of any application to appropriate water, application for extension of time, or any application to change the manner of use, place of use, point of diversion, or means of diversion of any water right.

VII. **Mutual Release.**

Other than claims arising from rights and obligations set forth in this Agreement, each of the Parties, for and in consideration of the mutual promises, duties, agreements, and consideration set forth in this Agreement, release, acquit, and forever discharge the other Parties,

their agents, employees, officers, directors, representatives, affiliates, successors, and assigns, of and from any and all claims, liabilities, demands, and causes of action, known or unknown, asserted or unasserted, which they had or may now have as a result of or arising out of or by reason of the facts and circumstances surrounding the claims and allegations filed in *Lincoln County Water District and Vidler Water Company v. State Engineer*, Case No.CV0519009, filed in the 7th Judicial District Court in and for the State of Nevada.

VIII. No Admission of Liability.

The Parties agree and acknowledge that this is a compromise of disputed claims and that the agreements shall not be construed as an admission of liability on the part of any Party; the Parties expressly deny any liability relating to the claims asserted.

IX. Entire Agreement.

This Agreement contains the entire agreement among the Parties, and the terms of the Agreement are contracted and not mere recitals. No provision of the Agreement may be modified except in writing signed by all Parties hereto.

X. Successors and Assigns.

This Agreement, and the rights and obligations contained herein, shall inure to the benefit and burden of and shall be binding on the grantees, successors, and assigns of the Parties to this Agreement.

XI. Governing Law.

This Agreement will be governed by and in accordance with the laws of the State of Nevada. Any rule requiring construction or interpretation against the drafter of the document is waived and this Agreement has been and is deemed drafted by all Parties in a mutual effort.

XII. Agreement Freely Entered into by the Parties.

Each Party represents and warrants that each has freely entered into this Agreement without fraud, duress, or any undue influence. Each Party represents and warrants that no promise or inducement has been offered except as set forth herein; that this Agreement is executed without reliance upon any statement or representation except as contained herein; and that the terms and conditions of this Agreement are fair and reasonable. Each Party represents and warrants that it or he was represented by competent counsel and was advised regarding the risks, duties, and obligations set forth in this Agreement.

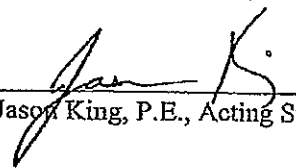
XIII. Facsimile and Photocopies.

Facsimiles and photocopies of this Agreement shall be considered originals for all purposes, including, but in no way limited to, any court proceedings.

XIV. Signed Counterparts.

This Agreement may be executed in any number of counterparts, each of which together shall be deemed to be an original, and all of which together shall be deemed to be one and the same instrument. The signatures required for execution may be transmitted by facsimile or e-mail, and such signatures shall be deemed duplicate originals, shall be effective upon receipt, may be admitted in evidence, and shall fully bind the Parties and persons making such signatures.

THE STATE ENGINEER, STATE OF NEVADA

 P.E.
By: Jason King, P.E., Acting State Engineer

Dated: 4/21/10

LINCOLN COUNTY WATER DISTRICT

By: Wade Poulsen, Lincoln County
Water District Manager

Dated: _____

VIDLER WATER COMPANY

By: Dorothy Timian-Palmer, P.E., President
and Chief Operating Officer

Dated: _____

THE STATE ENGINEER, STATE OF NEVADA

By: Jason King, P.E., Acting State Engineer

Dated: _____

LINCOLN COUNTY WATER DISTRICT



By: Wade Poulsen, Lincoln County
Water District Manager

Dated: 4/27/2010

VIDLER WATER COMPANY



By: Dorothy Timian-Palmer, P.E., President
and Chief Operating Officer

Dated: 4/27/2010

Approved and Consented to as to form:

RYLEY CARLOCK & APPLEWHITE

By: J. J. Winkler
John C. Lemaster
Jenny J. Winkler
Sean T. Hood

Dated: 4/20/10

ALLISON, MacKENZIE, PAVLAKIS, WRIGHT & FAGAN

By: _____
Karen A. Peterson

Dated: _____

Attorneys for Vidler Water Company, Inc.

DYLAN V. FREHNER, ESQ.

By: _____
Dylan V. Frehner

Dated: _____

Attorney for Lincoln County Water District

NEVADA ATTORNEY GENERAL'S OFFICE

By: _____
Bryan L. Stockton
Michael L. Wolz

Dated: _____

*Attorneys for the State Engineer, State of Nevada,
and Jason King, P.E., Acting State Engineer*

Approved and Consented to as to form:

RYLEY CARLOCK & APPLEWHITE

By: _____
John C. Lemaster
Jenny J. Winkler
Sean T. Hood

Dated: _____

ALLISON, MacKENZIE, PAVLAKIS, WRIGHT & FAGAN

By: Karen A. Peterson
Karen A. Peterson

Dated: 4-20-10

Attorneys for Vidler Water Company, Inc.

DYLAN V. FREHNER, ESQ.

By: _____
Dylan V. Frehner

Dated: _____

Attorney for Lincoln County Water District

NEVADA ATTORNEY GENERAL'S OFFICE

By: _____
Bryan L. Stockton
Michael L. Wolz

Dated: _____

*Attorneys for the State Engineer, State of Nevada,
and Jason King, P.E., Acting State Engineer*

Approved and Consented to as to form:

RYLEY CARLOCK & APPLEWHITE

By: _____
John C. Lemaster
Jenny J. Winkler
Sean T. Hood

Dated: _____

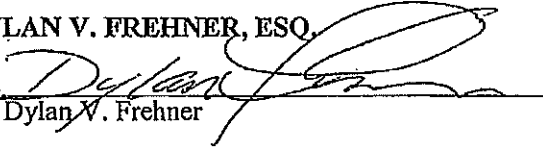
ALLISON, MacKENZIE, PAVLAKIS, WRIGHT & FAGAN

By: _____
Karen A. Peterson

Dated: _____

Attorneys for Vidler Water Company, Inc.

DYLAN V. FREHNER, ESQ.

By: 
Dylan V. Frehner

Dated: 4-21-10

Attorney for Lincoln County Water District

NEVADA ATTORNEY GENERAL'S OFFICE

By: _____
Bryan L. Stockton
Michael L. Wolz

Dated: _____

*Attorneys for the State Engineer, State of Nevada,
and Jason King, P.E., Acting State Engineer*

Approved and Consented to as to form:

RYLEY CARLOCK & APPLEWHITE

By: _____ Dated: _____
John C. Lemaster
Jenny J. Winkler
Sean T. Hood

ALLISON, MacKENZIE, PAVLAKIS, WRIGHT & FAGAN

By: _____ Dated: _____
Karen A. Peterson

Attorneys for Vidler Water Company, Inc.

DYLAN V. FREHNER, ESQ.

By: _____ Dated: _____
Dylan V. Frehner

Attorney for Lincoln County Water District

NEVADA ATTORNEY GENERAL'S OFFICE

By: _____ Dated: 21 APR 2010
Bryan L. Stockton
Michael L. Wolz

*Attorneys for the State Engineer, State of Nevada,
and Jason King, P.E., Acting State Engineer*

Exhibit 16

**SETTLEMENT AGREEMENT AMONG THE STATE ENGINEER,
STATE OF NEVADA, TRACY TAYLOR, P.E.,
NEVADA STATE ENGINEER, JASON KING, P.E.,
ACTING NEVADA STATE ENGINEER, LINCOLN COUNTY
WATER DISTRICT AND VIDLER WATER COMPANY**

Lincoln County Water District (the "District"), Vidler Water Company ("Vidler"), the State Engineer, State of Nevada, Tracy Taylor, P.E., Nevada State Engineer, and Jason King, P.E., Acting Nevada State Engineer, (collectively, the "State Engineer") enter into the following Settlement Agreement and Mutual Release ("Agreement") this 1st of April, 2010. The parties shall be referred to individually as "Party" and collectively as "Parties."

RECITALS

1. On December 11, 1998, the District and Vidler filed Application 64692 to appropriate 7,240 acre feet of groundwater in the Tule Desert Hydrographic Basin.
2. On December 11, 1998, the District and Vidler filed Application 64693 to appropriate 7, 240 acre feet of groundwater in Tule Desert Hydrographic Basin. On November 8, 2000, the District and Vidler filed Change Application 66932 to change the point of diversion and place of use requested under Application 64693.
3. On November 26, 2002, the State Engineer issued Ruling 5181 granting Application 66932 in the amount of 2,100 acre feet per year.
4. Ruling 5181 also allowed the District and Lincoln to perform additional work to determine if additional water was available for appropriation in the Tule Desert Hydrographic Basin under Application 64692.
5. After the District and Vidler performed the work provided for under Ruling 5181, the State Engineer issued Ruling 5986 granting Application 64692 in the amount of 396 acre feet per year.

6. On May 27, 2009, the District and Vidler appealed Ruling 5986 to the Seventh Judicial District Court of the State of Nevada, in and for the County of Lincoln in Case No. CV-0518009 entitled *Lincoln County Water District and Vidler Water Company v. State Engineer, State of Nevada*.

7. On July 21, 2009, the District and Vidler sued State Engineer Tracy Taylor and Acting State Engineer King in the United States District Court for the District of Nevada in Case No. CV00392-LRH-VPC entitled *Lincoln County Water District and Vidler Water Company v. Tracy Taylor, P.E. and Jason King, P.E.*

8. In order to avoid the expense and uncertainty of litigation the Parties desire to settle the two lawsuits on the terms and conditions set forth below.

AGREEMENT

In consideration of the mutual promises, duties, and agreements set forth below, the Parties agree as follows:

I. Conditional Grant of 7,240 Acre-Feet of Groundwater Per Year to the Lincoln County Water District and Vidler Water Company in the Tule Desert Hydrographic Basin Under N.R.S. § 533.3705 with 2,900 Acre-Feet Per Year Immediately Available for Use and the Remainder Subject to Staged Development.

A. There are two projects supported by the water rights developed from the Tule Desert that have been identified under Lincoln County's Water Master Plan: the development of 13,000 acres under the Lincoln County Land Act and the development of the Toquop Energy Park. The District and Vidler estimate the total water demand for these projects at build out to range from 15,000 acre feet per year to 16,000 acre feet per year. The State Engineer granted 2,100 acre feet per year to the District and Vidler under Permit 66932. The water rights granted under Permit 66932 have been conveyed to owner-developers for dedication under the Lincoln County Land Act.

B. The State Engineer shall grant Application 64692 in the amount of 7,240 acre feet annually. The total combined duty of Permits 64692 and 66932 shall not exceed 9,340 acre-feet annually. However, the State Engineer finds, in order to gather the necessary information to more accurately determine the additional water available to appropriate under N.R.S. § 533.370, development of water will occur in stages in conjunction with the updated June 2005 Monitoring Plan approved by the State Engineer.

1. The initial use of water under Permit 64692 is limited to 2,900 acre-feet annually (a total of 5,000 acre-feet annually including Permit 66932).
2. The Applicant shall calibrate to actual field conditions the Tule Desert Groundwater Flow Model developed by Peter Mock Groundwater Consulting, Inc., which calibration may be peer reviewed by the third party Reviewing Consultant (as described below) at the cost of the District and Vidler.
3. The District and Vidler shall continue to collect hydrologic data throughout Tule Desert using the existing metering and data collection equipment at the locations they currently maintain and submit such data at least annually to the State Engineer.
4. The State Engineer, the District, and Vidler shall meet annually to review the data submitted by the District and Vidler. The third party Reviewing Consultant (as described below) shall participate in these meetings. The State Engineer shall apply the provisions of Section III of this Settlement Agreement in setting criteria and in determining whether to authorize the use of additional water under Permit 64692 and in identifying necessary studies.

5. The District and Vidler shall implement a staged pumping development program that shall consist of a minimum of eight consecutive years (the "Staged Development Period"). During this Stage Development Period, pumping must average at least 2,500 acre feet annually, and in no year shall pumping be less than 2,000 acre feet annually.
6. Annually after the initial calibration and every year thereafter during the Staged Development Period, the District and Vidler shall submit the updated groundwater flow model with the data obtained during the Staged Development Period and provide predictive results for 10 years, 25 years, 100 years, and 500 years.
7. The District and Vidler may at any time seek the use of additional water up to the full amount under Permit 64692 to the extent that the additional studies and evidence demonstrate to the satisfaction of the State Engineer that additional water is available for appropriation under N.R.S. § 533.370.
8. At any time, the State Engineer may at his discretion authorize the use of all or a portion of the remaining quantity of water permitted under Application 64692 to the extent that the additional studies and evidence demonstrate to the satisfaction of the State Engineer that such additional water is available for appropriation and use pursuant to N.R.S. § 533.370. If, prior to the completion of the Staged Development Period described above, the State Engineer refuses a request from the District and Vidler to pump additional water, such refusal by the State Engineer shall not be considered an appealable order or decision under N.R.S. § 533.370.

9. The District, Vidler, and the State Engineer agree that Daniel B. Stephens and Peter Mock shall serve as the Study Consultants (as described below) for Application 64692.

II. Monitoring and Reporting.

The District and Vidler shall submit a revised Monitoring Plan, updating the June 2005 Monitoring Plan approved by the State Engineer in the matter of Permit 66932, to include pumping under Permit 64692.

III. Studies Under N.R.S. § 533.368 and the Use of Third Party Technical Consultants.

A. Nevada Revised Statute § 533.368 provides that if the State Engineer determines that a hydrological study, an environmental study, or any other study is necessary before he makes a final determination on an application pursuant to N.R.S. § 533.370 and the applicant, a governmental agency or other person has not conducted such a study or the required study is not available, the State Engineer shall advise the applicant of the need for the study and the type of study required. The required study must be conducted by the State Engineer or a person designated by him, the applicant, or a consultant approved by the State Engineer, as determined by the State Engineer. The applicant is to bear the cost of study. The State Engineer is to consult with the applicant and the governing body of the county in which the point of diversion and place of use is located concerning the scope and progress of the study.

B. The following steps will be followed for all current and future applications to appropriate groundwater in hydrographic basins located wholly or partially within the boundaries of Lincoln County, filed by the District and Vidler, either individually or jointly, unless it is necessary for the State Engineer to deny the applications pursuant

to N.R.S. § 533.370(1) and (6). This provision shall stay in effect for five (5) years from the date of the settlement, but may be renewed by agreement of the State Engineer, the District, and Vidler.

1. The State Engineer shall require the District and/or Vidler to perform a hydrological study to address the water resources of the particular hydrographic basin unless otherwise agreed to by the State Engineer, the District and Vidler. The District and Vidler may select the consultant ("Study Consultant") to perform the hydrologic study.
2. As set forth in NRS § 533.368(4)(a), the State Engineer shall consult with the District and Vidler concerning the scope and progress of the study and to determine the criteria necessary to adequately evaluate the applications. In addition to those required by Nevada law, the State Engineer shall set forth in writing as part of the criteria, any other procedures, policies, or methodologies that will be used to determine the amount of groundwater that is appropriable in the basins in which the applications are filed. This consultation will include the Reviewing Consultant discussed below. Additional meetings may be held as necessary among the State Engineer, the Reviewing Consultant, the District and Vidler concerning the scope and progress of the study. If during the course of study the State Engineer finds that additional studies, criteria, or scientific information are required to determine the amount of groundwater that is appropriable in the basins in which the applications are filed, the State Engineer shall identify the additional studies, criteria, or scientific information necessary and inform the District and/or Vidler. The District and/or Vidler

shall then develop studies and reports relating to the identified criteria. The State Engineer will agree to a reasonable extension of time to complete approved studies that are in progress. Once all reasonable extensions of time have elapsed, if the District and Vidler have not performed and submitted the required hydrologic study, the State Engineer may move forward under the provisions of N.R.S. § 533.368 with any study the State Engineer considers necessary for consideration of pending applications in the relevant hydrographic basins.

3. The State Engineer shall use an independent third party Reviewing Consultant selected by the State Engineer and paid for by the District and/or Vidler as set forth in N.R.S. § 533.368(3) to review and analyze the study or studies submitted to the State Engineer by the District and/or Vidler. The State Engineer shall advise the applicant of his selection and the applicant may indicate concerns relative to the qualifications and experience of the selected Reviewing Consultant, in writing to the State Engineer. The Reviewing Consultant shall serve as an advisor to the State Engineer on a hydrologic study prior to taking action on any application filed by the District and/or Vidler. The Reviewing Consultant may subcontract with other technical consultants to provide expertise in a given discipline after consulting with and approval by the State Engineer. If the State Engineer determines that an independent third party technical consultant is not needed, this provision to appoint a Reviewing Consultant can be waived by agreement of the Parties.

4. After a hydrologic study is completed and submitted to the State Engineer, the Reviewing Consultant shall evaluate the study and provide a report to the State Engineer regarding the study. The report shall be made part of the public records of the Nevada Division of Water Resources and shall be served by the applicant on any protestant to the particular applications. The District and/or Vidler and any protestant may comment on the Reviewing Consultant's report within 30 days after the date the report is filed in the Nevada Division of Water Resources. Under N.R.S. § 533.365(3), the State Engineer shall determine whether an administrative hearing is required or may require the filing of additional information as necessary for a full understanding of the matter before him. If a hearing is held, the Reviewing Consultant shall attend the hearing. The State Engineer shall consult with the Reviewing Consultant prior to issuing a ruling on the applications.
5. The State Engineer shall make the determination of the amount of water to be appropriated under each application taking into account the criteria established in Section III (B)(2), above, the report of the Reviewing Consultant, the comments filed with the State Engineer, and the criteria established in the Nevada Revised Statutes. The final determination of the water available for appropriation is the sole authority of the State Engineer.

IV. Kane Springs Hydrographic Basin.

Applications 74147 through 74150 for appropriations in the Kane Springs Hydrographic Basin filed by the District and Vidler will be returned to application status in the same priority as the applications had under the original filing in the records of the Nevada Division of Water Resources

under a separate settlement agreement that follows the same general format as found in Section III of this Agreement.

V. Ratification by Lincoln County Water District and Authority.

- A. The Parties recognize that this Agreement needs ratification by Lincoln County Water District's Board of Trustees.
- B. The representatives of the Parties executing this Agreement represent and warrant that they are authorized to enter into this Agreement.

VI. Dismissal of Actions.

Upon full execution of the Agreements containing the terms herein and ratification by the Lincoln County Water District Board of Trustees, the State Engineer, the District, and Vidler shall stipulate to dismiss the state district court appeal of State Engineer's Ruling No. 5986, more specifically identified as *Lincoln County Water District and Vidler Water Company v. State Engineer, State of Nevada*, Case No. CV-0518009, filed in the Seventh Judicial District Court in and for the State of Nevada, and the federal lawsuit, more specifically identified as *Lincoln County Water District and Vidler Water Company v. Tracy Taylor, P.E. and Jason King, P.E.*, Case No. CV00392-LRH-VPC filed in the United States District Court in and for the District of Nevada, with each Party to bear its or his own costs and attorneys fees.

VII. Extensions of Time.

This Agreement shall not affect or limit the State Engineer's discretion in considering any applications for extensions of time for the filing of proof of completion of work, proofs of beneficial use, or to avoid a forfeiture. Any requests for extension of time shall be addressed under controlling provisions of law.

VIII. No Precedential Effect.

The State Engineer enters into this Agreement because of the unique factual circumstances surrounding this case. Aside from the rights and responsibilities established in this Agreement, the Agreement has no precedential effect in any proceeding involving these Parties or any other parties and may not be relied upon as evidence of policy or practices of the State Engineer; provided, however, that the provisions of Section III may be relied upon and control the processing of applications as set forth in the provisions of Section III. This Agreement does not limit the State Engineer's authority or discretion as it relates to consideration of any application to appropriate water, application for extension of time, or any application to change the manner of use, place of use, point of diversion, or means of diversion of any water right.

IX. Mutual Release.

Other than claims arising from rights and obligations set forth in this Agreement, each of the Parties, for and in consideration of the mutual promises, duties, agreements, and consideration set forth in this Agreement, release, acquit, and forever discharge the other Parties, their agents, employees, officers, directors, representatives, affiliate, successors, and assigns, of and from any and all claims, liabilities, demands, and causes of action, known or unknown, asserted or unasserted, which they had or may now have as a result of or arising out of or by reason of the facts and circumstances surrounding the claims and allegations filed in Case No. CV-0518009 entitled *Lincoln County Water District and Vidler Water Company v. State Engineer, State of Nevada* and in Case No. CV00392-LRH-VPC entitled *Lincoln County Water District and Vidler Water Company v. Tracy Taylor, P.E. and Jason King, P.E.*

X. No Admission of Liability.

The Parties agree and acknowledge that this is a compromise of disputed claims and that the agreements shall not be construed as an admission of liability on the part of any Party; the Parties expressly deny any liability relating to the claims asserted.

XI. Entire Agreement.

This Agreement contains the entire agreement among the Parties, and the terms of the Agreement are contracted and not mere recitals. No provision of the Agreement may be modified except in writing signed by all Parties hereto.

XII. Successors and Assigns.

This Agreement, and the rights and obligations contained herein, shall inure to the benefit and burden of and shall be binding on the grantees, successors, and assigns of the Parties to this Agreement.

XIII. Governing Law.

This Agreement will be governed by and in accordance with the laws of the State of Nevada. Any rule requiring construction or interpretation against the drafter of the document is waived and this Agreement has been and is deemed drafted by all Parties in a mutual effort.

XIV. Agreement Freely Entered into by the Parties.

Each Party represents and warrants that each has freely entered into this Agreement without fraud, duress, or any undue influence. Each Party represents and warrants that no promise or inducement has been offered except as set forth herein; that this Agreement is executed without reliance upon any statement or representation except as contained herein; and that the terms and conditions of this Agreement are fair and reasonable. Each Party represents and warrants that it or he was represented by competent counsel and was advised regarding the risks, duties, and obligations set forth in this Agreement.


XV. Facsimile and Photocopies.

Facsimiles and photocopies of this Agreement shall be considered originals for all purposes, including, but in no way limited to, any court proceedings.

XVI. Signed Counterparts.


This Agreement may be executed in any number of counterparts, each of which together shall be deemed to be an original, and all of which together shall be deemed to be one and the same instrument. The signatures required for execution may be transmitted by facsimile or e-mail, and such signatures shall be deemed duplicate originals, shall be effective upon receipt, may be admitted in evidence, and shall fully bind the Parties and persons making such signatures.

THE STATE ENGINEER, STATE OF NEVADA


By: Jason King, P.E.,
Acting State Engineer


Dated: 4/15/10

TRACY TAYLOR, P.E., NEVADA STATE ENGINEER


By: Tracy Taylor, P.E.,
Nevada State Engineer

Dated: 4/15/10

JASON KING, P.E., ACTING STATE ENGINEER


By: Jason King, P.E.,
Acting State Engineer

Dated: 4/15/10

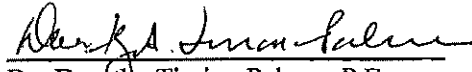
LINCOLN COUNTY WATER DISTRICT



By: Wade Poulsen, Lincoln
County Water District Manager

Dated: 4/15/2010

VIDLER WATER COMPANY



By: Dorothy Timian-Palmer, P.E.,
President and Chief Operating Officer

Dated: 4/16/2010


Approved and Consented to as to form:

RYLEY CARLOCK & APPLEWHITE

By: _____
John C. Lemaster, Esq.
Jenny J. Winkler, Esq.
Sean T. Hood, Esq.

Dated: _____

ALLISON, MacKENZIE, PAVLAKIS,
WRIGHT & FAGAN, LTD.

By: 
Karen A. Peterson, Esq.

Dated: April 16, 2010

Attorneys for Vidler Water Company, Inc.

DYLAN V. FREHNER, ESQ.

By: _____
Dylan V. Frehner, Esq.

Dated: _____

Attorney for Lincoln County Water District

LINCOLN COUNTY WATER DISTRICT

By: Wade Poulsen, Lincoln
County Water District Manager

Dated: _____

VIDLER WATER COMPANY

By: Dorothy Timian-Palmer, P.E.,
President and Chief Operating Officer

Dated: _____

Approved and Consented to as to form:

RYLEY CARLOCK & APPLEWHITE

By: J. J. Winkler
John C. Lemaster, Esq.
Jenny J. Winkler, Esq.
Sean T. Hood, Esq.

Dated: 4/16/10

**ALLISON, MacKENZIE, PAVLAKIS,
WRIGHT & FAGAN, LTD.**

By: _____
Karen A. Peterson, Esq.

Dated: _____

Attorneys for Vidler Water Company, Inc.

DYLAN V. FREHNER, ESQ.

By: _____
Dylan V. Frehner, Esq.

Dated: _____

Attorney for Lincoln County Water District

Apr 15 2010 3:38PM

DYLAN V FREHNER

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p. 1

LINCOLN COUNTY WATER DISTRICT

By: Wade Poulsen, Lincoln
County Water District Manager

Dated: _____

VIDLER WATER COMPANY

By: Dorothy Timian-Palmer, P.E.,
President and Chief Operating Officer

Dated: _____

Approved and Consented to as to form:

RYLEY CARLOCK & APPLEWHITE

By: _____
John C. Lemaster, Esq.
Jenny J. Winkler, Esq.
Sean T. Hood, Esq.

Dated: _____

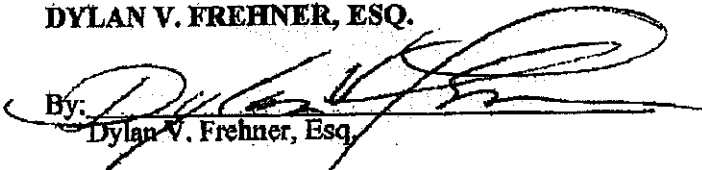
**ALLISON, MacKENZIE, PAVLAKIS,
WRIGHT & FAGAN, LTD.**

By: _____
Karen A. Peterson, Esq.

Dated: _____

Attorneys for Vidler Water Company, Inc.

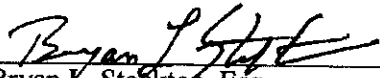
DYLAN V. FREHNER, ESQ.

By: 
Dylan V. Frehner, Esq.

Dated: 4/15/10

Attorney for Lincoln County Water District

NEVADA ATTORNEY GENERAL'S OFFICE

By: 
Bryan L. Stockton, Esq.
Michael L. Wölz, Esq.

Dated: 15 APR 2010

Attorneys for the State Engineer, State of Nevada, Tracy Taylor, P.E., Nevada State Engineer, and Jason King, P.E., Acting State Engineer

Exhibit 17



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Caliente Field Office

P.O. Box 237 (1400 South Front St.)

Caliente, Nevada 89008-0237

http://www.blm.gov/nv/st/en/fo/ely_field_office.html

JAN 15 2008



In Reply Refer To:

2870 (NV-045)

N-79742

CERTIFIED MAIL: 7006 0810 0005 7114 4204; RETURN RECEIPT REQUESTED

DECISION

Lincoln County Water District
P.O. Box 307
Pioche, NV 89043

FLPMA Title V
Right-of-way
Water Pipeline and
Ancillary Facilities

Right-of-Way Issued Rental Exempt

Enclosed is your copy of executed right-of-way (ROW) grant N-79742 for the Kane Springs Valley Groundwater Development Project, which gives you the right to construct, operate and maintain a groundwater production and transmission pipeline and ancillary facilities in southern Lincoln County, Nevada. Also attached and made a part of the grant are the legal descriptions (Exhibit A), Right-of-Way Stipulations (Exhibit B), Right-of-Way Special Stipulations (Exhibit C), and Ely RMP Best Management Practices (Appendix D). Exhibits E, F and G were sent under separate cover.

In accordance with Section 301(b) of the Lincoln County Conservation, Recreation, and Development Act of November 30, 2004 (118 Stat.2403), you are exempt from rental fees.

The monitoring fee for this ROW will be charged in accordance with the Cost Recovery Agreement and cost recovery account 5101 F851 set up for processing this right-of-way action.

Please be aware that you may not conduct any activities related to your right-of-way project on public land, other than casual use, until the final Plan of Development has been received and approved by the BLM authorized officer and a specific Notice to Proceed has been issued.

This decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR, Part 4 and the enclosed Form 1842-1. If an appeal is taken, your notice of appeal must be filed in this office (at the above address) within 30 days from receipt of this decision. The appellant has the burden of showing that the decision appealed from is in error.

If you wish to file a petition (request) pursuant to regulation 43 CFR 2801.10 or 43 CFR 2881.10 for a stay (suspension) of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, the petition for a stay must accompany your notice of appeal. A petition for a stay is required to show sufficient justification based on the standards listed below.


Copies of the notice of appeal and petition for a stay must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (see 43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

Standards for Obtaining a Stay

Except as otherwise provided by law or other pertinent regulation, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards:

- (1) The relative harm to the parties if the stay is granted or denied,
- (2) The likelihood of the appellant's success on the merits,
- (3) The likelihood of immediate and irreparable harm if the stay is not granted, and
- (4) Whether the public interest favors granting the stay.

If you have any questions please contact Doris Metcalf at 775-289-1852 or send e-mail to Doris_Metcalf@nv.blm.gov.


Mike Dwyer
Acting Field Manager
Caliente Field Office

Enclosures

FORM 2800-14
(August 1985)

Issuing Office
Ely Field Office

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
RIGHT-OF-WAY GRANT/TEMPORARY USE PERMIT

SERIAL NUMBER N-85034

1. A right-of-way is hereby granted pursuant to Title V of the Federal Land Policy and Management Act of October 21, 1976 (90 Stat. 2776; 43 U.S.C. 1761), and Section 301(b) of the Lincoln County Conservation, Recreation, and Development Act of November 30, 2004 (LCCRDA) (118 Stat. 2403).
2. Nature of Interest:
 - a. By this instrument, the holder:

Lincoln County Water District
P.O. Box 685
Pioche, NV 89043

receives a right to construct, operate, maintain, and terminate the Kane Springs Valley Groundwater Development Project consisting of water monitoring and production wells, water collection /lateral pipelines, a water forebay storage tank, a water transmission pipeline, electrical power transmission and distribution step-down substations with electrical transmission/distribution lines, and a telemetry system/fiber optic telecommunications system on public lands described as described in Exhibit A.
 - b. The right-of-way granted herein is 200 feet wide, 69,696 feet long (approximately 13.2 miles) and contains 320 acres, more or less.
 - c. This instrument is issued in perpetuity from its effective date unless, prior thereto, it is relinquished, abandoned, terminated, or modified pursuant to the terms and conditions of this instrument or of any applicable Federal law or regulation.
 - d. This instrument may or may not be renewed. If renewed, the right-of-way or permit shall be subject to the regulations existing at the time of renewal and any other terms and conditions that the authorized officer deems necessary to protect the public interest.
 - e. Notwithstanding the expiration of this instrument or any renewal thereof, early relinquishment, abandonment, or termination, the provisions of this instrument, to the extent applicable, shall continue in effect and shall be binding on the holder, its successors, or assigns, until they have fully satisfied the obligations and/or liabilities accruing herein before or on account of the expiration, or prior termination, of the grant.
3. Rental:

For and in consideration of the rights granted, the holder agrees to pay the Bureau of Land Management fair market value rental as determined by the authorized officer unless specifically exempted from such payment by regulation. Provided, however, that the rental may be adjusted by the authorized officer, whenever necessary, to reflect changes in the fair market rental value as determined by the application of sound

business management principles, and so far as practicable and feasible, in accordance with comparable commercial practices.

4. Terms and Conditions:

- a. This grant or permit is issued subject to the holder's compliance with all applicable regulations contained in Title 43 Code of Federal Regulations part 2800.
- b. Upon grant termination by the authorized officer, all improvements shall be removed from the public lands within 90 days, or otherwise disposed of as provided in paragraph (4)(d) or as directed by the authorized officer.
- c. Each grant issued pursuant to the authority of paragraph (1)(a) for a term of 20 years or more shall, at a minimum, be reviewed by the authorized officer at the end of the 20th year and at regular intervals thereafter not to exceed 10 years. Provided, however, that a right-of-way or permit granted herein may be reviewed at any time deemed necessary by the authorized officer.
- d. The stipulations, plans, maps, or designs set forth in Exhibit(s) A through D, attached hereto, are incorporated into and made a part of this grant instrument as fully and effectively as if they were set forth herein in their entirety.
- e. Failure of the holder to comply with applicable law or any provision of this right-of-way grant or permit shall constitute grounds for suspension or termination thereof.
- f. The holder shall perform all operations in a good and workmanlike manner so as to ensure protection of the environment and the health and safety of the public.

IN WITNESS WHEREOF, The undersigned agrees to the terms and conditions of this right-of-way grant or permit.

George T. Rowe
(Signature of Holder)

LCWD Chairman
(Title)

01/07/09
(Date)

Widun-Born
(Signature of Authorized Officer)

Field Manager (Acting)
(Title)

01/07/09
(Effective Date of Grant)

Exhibit A
Right-of-Way
Legal Description
Lincoln County Water District
NV-79742

Mount Diablo Meridian

- T. 11 S., R. 63 E., sec. 1, SE $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 11, SE $\frac{1}{4}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$;
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- T. 10 S., R. 64 E., sec. 1, SE $\frac{1}{4}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$;
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sec. 21, NE $\frac{1}{4}$ SE $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$;
sec. 22, NW $\frac{1}{4}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$;
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sec. 31, NE $\frac{1}{4}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 32, NE $\frac{1}{4}$ NW $\frac{1}{4}$, NW $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$, NW $\frac{1}{4}$ SW $\frac{1}{4}$;
- T. 11 S., R. 64 E., sec. 6, NW $\frac{1}{4}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, NW $\frac{1}{4}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SW $\frac{1}{4}$;
- T. 10 S., R. 65 E., sec. 6, NE $\frac{1}{4}$ NW $\frac{1}{4}$, NW $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$.

**Exhibit B
Right-of-Way
Stipulations
Lincoln County Water District
NV-79742**

1. Hereinafter, holder means any party granted this right-of-way and/or temporary use permit, its agents, contractors, representatives, or other persons directed by holder to construct, maintain, repair, restore, relinquish, abandon, modify, rehabilitate, or terminate this right-of-way, and holder's successors, or assigns.
2. This grant is subject to all valid rights existing on the effective date of this grant.
3. There is reserved to the authorized officer, the right to grant additional rights-of-way or permits for compatible use on, over, under, or adjacent to the land involved in this grant.
4. The holder shall maintain the right-of-way in a sanitary condition at all times during construction, maintenance or other operations during the term of this right-of-way. Any waste material, to include all discarded matter, will be disposed of promptly at a State of Nevada approved sanitary landfill site by the holder. "Waste" means all discarded matter including human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.
5. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 U.S.C. 2601 et. seq. (1982) with regards to any toxic substances that are used, generated by, or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
6. Any relocation, additional construction, or use that is not in accord with the right-of-way grant or approved Plan of Development, shall not be initiated without prior written approval of the authorized officer.
7. No construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support construction equipment. If such equipment creates ruts in excess of 4 inches deep, the soil shall be deemed too wet to adequately support construction equipment.

8. Holder may not construct or make new access roads or travel cross-country by vehicle to reach the grant area unless prior written approval is given by the Authorized Officer.
9. The holder shall conduct all activities directly or indirectly associated with the construction, maintenance, operation, and termination of the right-of-way within the authorized limits of the right-of-way.
10. If previously unidentified cultural resources (including human remains) are discovered, the procedures outlined in State Protocol Agreement, Section VIII (Discovery Situations) would be adhered to. Under the agreement, all related construction activities would cease within 100 meters of the find, and the LCWD representative would notify the BLM Authorized Officer. The BLM, in coordination with the SHPO, interested persons and Tribal representatives, would determine if construction activities can proceed or if mitigation is required. If mitigation is required, the BLM (in consultation with the SHPO), interested persons and Tribal representatives) would notify LCWD of the need for mitigation, and additional mitigation measures would be implemented. The BLM would ensure that reports of mitigation efforts for discovery situations are completed in a timely manner and conform to the Department of the Interior's Formal Standards for Final Reports of Data Recovery Program (42 FR 5377-79). Activities may resume after the BLM notifies the LCWD that the mitigation process is complete.
11. The holder shall be fully liable to the United States for any damage or injury incurred by the United States in connection with the use and occupancy of the right-of-way area by the holder. The holder shall fully indemnify the United States for liability, damage, or claims arising in connection with the holder's use and occupancy of the right-of-way area.
12. The holder of right-of-way N-79742 agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq., or the Recourse Conservation and Recovery Act of 1976, 42 U.S.C. 6901 et seq.) on the right-of-way (unless the release or threatened release is wholly unrelated to the right-of-way holder's activity on the right-of-way). This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
13. Actions which may impact migratory birds are not allowed during the critical nesting period. The critical nesting period is established as May 1 through July 15. Activities may not occur during this period without special authorization, and only after breeding bird surveys have been conducted by the District Office wildlife team. If you wish to conduct activities during this period, you must notify the Ely District Office wildlife team a minimum of 30 days prior to the day you wish to begin in order for the required survey to be conducted. Authorization for construction during this breeding period would be contingent on the findings of the survey.
14. Removal and disturbance of vegetation would be kept to a minimum through construction site management (e.g. using previously disturbed areas and existing easements, limiting equipment/materials storage and staging area sites, etc.)

15. A speed limit of 25 miles per hour shall be required for all vehicles on unposted access roads and roads in desert tortoise habitat.
16. To restrict OHV use in unauthorized areas, restrictive barriers will be constructed to limit public access of new maintenance roads adjacent to designated Wilderness Areas. Barrier control methods would be coordinated with the authorized officer and may include locked gates and fencing.
17. In the event that the public land underlying the easement encompassed in this grant is conveyed out of Federal ownership, Grantor waives any right it has to administer the easement within the conveyed land under Federal laws, statutes, and regulations, including the regulations at 43 CFR Part 2880, including any rights to have the Grantee apply to Grantor for amendments, modifications, or assignments and for Grantor to approve or recognize such amendments, modifications, or assignments. At the time of conveyance, Grantor's successors and assigns shall succeed to the interests of the Grantor in all matters relating to the easement within the conveyed land and shall be subject to applicable State and local government laws, statutes, and ordinances. After conveyance, any disputes concerning compliance with the use and the terms and conditions of the easement shall be considered a civil matter between the Grantee and the Grantor's successors and assigns.
18. Desert tortoise remuneration fees will be managed consistent with a Memorandum of Agreement to be developed between BLM and the U.S. Fish and Wildlife Service. Fees collected may be used in coordination with the mitigation program of the CSI MSHCP, to implement conservation and recovery measures within the Mormon Mesa critical habitat unit.
19. All structures or facilities requiring permanent lighting will utilize anti-glare light fixtures.
20. Within 90 days of construction completion, the Holder shall provide the Authorized Officer with data in a format compatible with the Bureau's Arc-Info Geographic Information System to accurately locate and identify the right-of-way.

Acceptable data formats are:

- (1) Corrected Global Positioning System files with sub-meter accuracy or better, in NAD 27 or NAD 83;
- (2) An AUTOCAD dxf file;
- (3) Or ARCInfo export files on a CD ROM, 100 mb ZIP disk or 1 gb Jazz disk.

Data may be submitted in any of the following formats:

- (1) ARCInfo export file;
- (2) On a 3.5 inch floppy disk in compressed or uncompressed format. Compressed or ZIPed data must include a copy of the UNZIP.EXE file on the disk.

All data shall include metadata for each coverage, and conform to the Content Standards for Digital Geospatial Metadata Federal Geographic Data Committee standards.

On behalf of Lincoln County Water District, I have reviewed the above stipulations for the Kane Springs Valley project right-of-way and agree to follow them.

George T. Lowe
Lincoln County Water District

01/07/09
Date

Exhibit C
Right-of-Way
Special Stipulations
Lincoln County Water District
NV-79742

1. Additional construction, or use that is not in accord with the approved plan(s) of development, shall not be initiated without the prior written approval of the authorized officer. A copy of the complete right-of-way grant, including all stipulations and approved plan(s) of development, shall be made available on the right-of-way area during construction, operation, and termination to the authorized officer. Noncompliance with the above will be grounds for an immediate temporary suspension of activities if it constitutes a threat to public health and safety or the environment.
2. The holder will notify the Authorized Officer of any change in the future ownership status of any facilities constructed on the right-of-way grant.
3. The holder must amend the right-of-way grant at any time additional land, equipment, and/or new uses are proposed which are beyond the scope of this existing right-of-way grant, as authorized.
4. The holder shall not initiate any construction or other surface disturbing activities on the right-of-way without the prior approval of a Plan of Development and written authorization of the Authorized Officer. Such written authorization shall be a Notice to Proceed (NTP) issued by the Authorized Officer. Any NTP shall authorize construction or use only as therein expressly stated and only for the particular location(s) or use(s) therein described.
5. The holder will provide the authorized officer all copies of legal agreements between Lincoln County Water District and Lincoln County Power District No. 1 as pertains to the construction, operation, maintenance and point of purchase of the electrical distribution system of the project prior to the Notice to Proceed.
6. The holder will provide the authorized officer all copies of legal agreements between Lincoln County Water District and Lincoln County Telephone as pertains to the construction, operation, maintenance and point of purchase of the telecommunication system for the project prior to the Notice to Proceed.
7. The holder shall provide a performance and reclamation bond in the amount of \$100,000, to be maintained until restoration of disturbed areas and other requirements relative to the construction phase of the project have been accepted by the Authorized Officer. Upon completion, or partial completion of construction activities, the authorized officer may reduce the amount of the bond.

8. Should the bond(s) delivered under this grant become unsatisfactory to the Authorized Officer, the holder, shall, within 30 days of demand, furnish a new bond.

On behalf of Lincoln County Water District, I have reviewed the above special stipulations for the Kane Springs Valley project right-of-way and agree to follow them.

George T. Rowe
Lincoln County Water District

01/07/09
Date

Exhibit D
Best Management Practices
Kane Springs Groundwater Development Project
N-79742

(Source: Ely District Resource Management Plan, August 2008)

1. Use dust abatement techniques on unpaved, unvegetated surfaces to minimize airborne dust.
2. Post and enforce speed limits (e.g., 25 miles per hour) to reduce airborne fugitive dust.
3. Cover construction materials and stockpiled soils if they are a source of fugitive dust.
4. Use dust abatement techniques before and during surface clearing, excavation, or blasting activities.
5. Construct access roads and fords that cross stream channels to BLM road standards.
6. Limit stream crossings on travel routes and trails to the minimal number necessary to minimize sedimentation and compaction. The BLM Authorized Officer will determine if any impacts need to be rehabilitated by the right away holder.
7. During periods of adverse soil moisture conditions caused by climatic factors such as thawing, heavy rains, snow, flooding, or drought, suspend activities on existing roads that could create excessive surface rutting. When adverse conditions exist, the operator will contact the BLM Authorized Officer for an evaluation and decision based on soil types, soil moisture, slope, vegetation, and cover.
8. When preparing the site for reclamation, include contour furrowing, terracing, reduction of steep cut and fill slopes, and the installation of water bars, as determined appropriate for site-specific conditions.
9. Restoration requirements include reshaping, re-contouring, and/or resurfacing with topsoil, installation of water bars, and seeding on the contour. Removal of structures such as culverts, concrete pads, cattle guards, and signs would usually be required. Fertilization and/or fencing of the disturbance may be required. Additional erosion control measures (e.g., fiber matting and barriers) to discourage road travel may be required.
10. Where seeding is required, use appropriate seed mixture and seeding techniques approved by the BLM Authorized Officer.
11. The BLM Authorized Officer will specify required special handling and recovery techniques for Joshua trees, yucca, and some cactus in the southern part of the planning area on a site-specific basis.

12. Keep removal and disturbance of vegetation to a minimum through construction site management (e.g., using previously disturbed areas and existing easements, limiting equipment/materials storage and staging area sites, etc.).
13. Generally, conduct reclamation with native seeds that are representative of the indigenous species present in the adjacent habitat. Document rationale for potential seeding with selected nonnative species. Possible exceptions would include use of nonnative species for a temporary cover crop to out-compete weeds. In all cases, ensure seed mixes are approved by the BLM Authorized Officer prior to planting.
14. Certify that all interim and final seed mixes, hay, straw, and hay/straw products are free of plant species listed on the Nevada noxious weed list.
15. An area is considered to be satisfactorily reclaimed when all disturbed areas have been recontoured to blend with the natural topography, erosion has been stabilized, and an acceptable vegetative cover has been established. Use the Nevada Guidelines for Successful Revegetation prepared by the Nevada Division of Environmental Protection, the BLM, and the U.S. Department of Agriculture Forest Service (or most current revision or replacement of this document) to determine if revegetation is successful.
16. Utility companies will manage vegetation in their rights-of-way for safe and reliable operation while maintaining vegetation and wildlife habitat.
17. Respread weed-free vegetation removed from the right-of-way to provide protection, nutrient recycling, and seed source.
18. Install wildlife escape ramps in all watering troughs, including temporary water haul facilities, and open storage tanks. Pipe the overflow away from the last water trough on an open system to provide water at ground level.
19. Consider seasonal distribution of large wildlife species when determining methods used to accomplish weed and insect control objectives.
20. Protect active raptor nests in undisturbed areas within 0.25 mile of areas proposed for vegetation conversion using species-specific protection measures. Inventory area containing suitable nesting habitat for active raptor nests prior to the initiation of any project.
21. When pumping water from any pond or stream, screen the intake end of the draft hose to prevent fish from being ingested. Screen opening size would be a maximum of 3/16 inch (4.7 millimeters).
22. Use current science, guidelines, and methodologies (Avian Power Line Interaction Committee 1994, 1996, 2005) for all new and existing powerlines to minimize raptor and other bird electrocution and collision potential.

23. When managing weeds in areas of special status species, carefully consider the impacts of the treatment on such species. Wherever possible, hand spraying of herbicides is preferred over other methods.

24. For streams currently occupied by a special status species, do not allow extraction of water from ponds or pools if stream inflow is minimal (i.e., during drought situations) and extraction of water would lower the existing pond or pool level.

25. Ensure that all activities associated with the undertaking, within 100 meters of the discovery, are halted and the discovery is appropriately protected, until the BLM authorized officer issues a Notice to Proceed. A Notice to Proceed may be issued by the BLM under any of the following conditions:

- Evaluation of potentially eligible resource(s) results in a determination that the resource(s) are not eligible;
- The fieldwork phase of the treatment option has been completed; and
- The BLM has accepted a summary description of the fieldwork performed and a reporting schedule for that work.

26. The operator will inform all persons associated with the project that knowingly disturbing cultural resources (historic or archaeological) or collecting artifacts is illegal.

27. When paleontological resources of potential scientific interest are encountered (including all vertebrate fossils and deposits of petrified wood), leave them intact and immediately bring them to the attention of the BLM Authorized Officer.

28. On industrial facilities authorized by the Ely District Office, utilize anti-glare light fixtures to limit light pollution.

29. Design access roads requiring construction with cut and fill to minimize surface disturbance and take into account the character of the landform, natural contours, cut material, depth of cut, where the fill material would be deposited, resource concerns, and visual contrast. Avoid construction of access roads on steep hillsides and near watercourses where alternate routes provide adequate access.

30. Where adverse impacts or safety considerations warrant, limit or prohibit public access when authorizing specific routes to areas or sites under permit or lease.

31. Notify the BLM authorized officer within 5 days of completion of reclamation work so that timely compliance inspections can be completed.

32. Remove vegetation, where appropriate, to protect facilities (e.g., range improvements, communication sites, and recreation sites).

33. When maintaining unpaved roads on BLM-administered lands, avoid the unnecessary disturbance of adjacent native vegetation and the spread of weeds. Grade road shoulders or barrow ditches only when necessary to provide for adequate drainage. Minimize the

width of grading operations. The BLM Authorized Officer will meet with equipment operators to ensure that they understand the objective.

34. Consider nozzle type, nozzle size, boom pressure, and adjuvant use and take appropriate measures for each herbicide application project to reduce the chance of chemical drift.

35. All applications of approved pesticides will be conducted only by certified pesticide applicators or by personnel under the direct supervision of a certified applicator.

36. Prior to commencing any chemical control program, and on a daily basis for the duration of the project, the certified applicator will provide a suitable safety briefing to all personnel working with or in the vicinity of the herbicide application. This briefing will include safe handling, spill prevention, cleanup, and first aid procedures.

37. Store all pesticides in areas where access can be controlled to prevent unauthorized/untrained people from gaining access to the chemicals.

38. Areas treated with pesticides will be adequately posted to notify the public of the activity and or safe reentry dates, if a public notification requirement is specified on the label of the product applied. The public notice signs will be at least 8 ½" x 11" in size and will contain the date of application and the date of safe re-entry.

39. The right-of-way holder will assume liability for and clean up of any and all releases of hazardous substances of oil (more than one quart) disposed on public land as defined in the National Oil and Hazardous Substances Contingency Plan (Title 40 Code of Federal Regulations Subpart 300). The holder will immediately notify the BLM Authorized Officer of any and all releases of hazardous substances or oil (more than one quart) on public land.

40. Properly dispose of all tailings, dumps, and deleterious materials or substances. Take measures to isolate, control, and properly dispose of toxic and hazardous materials.

41. Remove and properly dispose of all trash, garbage, debris, and foreign matter. Maintain the disposal site and leave it in a clean and safe condition. Do not allow burning at the site.

42. Do not drain oil or lubricants onto the ground surface. Immediately clean up any spills under 25 gallons; clean up spills over 25 gallons as soon as possible and report the incident to the BLM Authorized Officer and Nevada Division of Environmental Protection.

43. Containerize petroleum products such as gasoline, diesel fuel, helicopter fuel, and lubricants in approved containers. Properly store hazardous materials in separate containers to prevent mixing, drainage, or accidents.

Exhibit 18

EXHIBIT 18



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Nevada Fish and Wildlife Office

4701 North Torrey Pines Drive

Las Vegas, Nevada 89130

Ph: (702) 515-5230 ~ Fax: (702) 515-5231

October 29, 2008

File Nos. 84320-2008-F-0007 and

84320-2008-I-0216

Memorandum

To: Field Manager, Ely Field Office, Bureau of Land Management, Ely, Nevada

From: Field Supervisor, Nevada Fish and Wildlife Office, Reno, Nevada

Subject: Request for Formal and Informal Consultation on the Kane Springs Valley Groundwater Development Project in Lincoln County, Nevada

This document transmits the U.S. Fish and Wildlife Service's (Service) biological opinion based on our review of the proposed Kane Springs Valley Groundwater Development Project and its possible adverse effects on the desert tortoise (*Gopherus agassizii*) (Mojave population), listed as threatened under the Endangered Species Act of 1973, as amended (Act) (16 U.S.C. 1531 *et seq.*), and its designated critical habitat, and the Moapa dace (*Moapa coriacea*), listed as endangered under the Act. No critical habitat has been designated for the Moapa dace. Further, the Bureau of Land Management (BLM) requests concurrence that the proposed project *may affect, but is not likely to adversely affect* the southwestern willow flycatcher (*Empidonax traillii extimus*), listed as endangered under the Act. No designated critical habitat for the southwestern willow flycatcher occurs in the project area. The Lincoln County Water District (LCWD) has applied for a BLM right-of-way to construct and operate a system of water facilities on BLM-managed land in southern Lincoln County.

This biological opinion is issued in accordance with section 7 of the Act and based on information provided in BLM's memorandum dated September 27, 2007, to the Service (received on September 28, 2007), and revised biological assessment (BA), dated December 2007 (ARCADIS 2007); Amended Stipulation for Withdrawal of Protests (Stipulated Agreement) dated August 8, 2006; discussions between the Service and BLM; and our files. A complete administrative record of this consultation is on file in the Service's Nevada Fish and Wildlife Office in Las Vegas.

TAKE PRIDE
IN AMERICA 

Field Manager

File Nos. 84320-2008-F-0007 and
84320-2008-I-0216

This biological opinion does not rely on the regulatory definition of "destruction or adverse modification" of critical habitat at 50 CFR 402.02. Instead, we have relied upon the statutory provisions of the Act to complete the following analysis with respect to critical habitat.

INFORMAL CONSULTATION

Southwestern willow flycatcher

No habitat is present for the southwestern willow flycatcher within the project area. The closest breeding populations occur at Pahrangat National Wildlife Refuge (NWR) approximately 23 miles northwest and in the Warm Springs Area, approximately 25 miles southeast. Since the springs in the Warm Springs Area are supplied by water from the deep carbonate aquifer, groundwater pumping in the Kane Springs Valley Hydrographic Basin could affect water levels in the Muddy River System. These effects to riparian vegetation will be minimized by actions contained in the Stipulated Agreement among the Service, LCWD and Vidler Water Company, Inc (VWC), which are designed to maintain minimum in-stream flows in the Warm Springs Area of the Muddy River system in order to protect and recover the Moapa dace. (See section below entitled "Proposed Minimization Measures for Moapa Dace"). The project is anticipated to have insignificant effects to the southwestern willow flycatcher since any decreases in groundwater flow to the Muddy River system will be minimized by the Stipulated Agreement.

In consideration of the proposed action, potential effects of the proposed action, and measures proposed by BLM, the Service concurs with BLM's determination that the proposed action *may affect, but is not likely to adversely affect* the southwestern willow flycatcher. This response constitutes informal consultation under regulations promulgated in 50 CFR§402.14, which establishes procedures governing interagency consultation under section 7 of the Act. This informal consultation does not authorize take of any listed species.

CONSULTATION HISTORY

The following chronology documents the consultation process that culminated in the following biological opinion for the desert tortoise and its designated critical habitat and for the Moapa dace:

On May 8, 2006, the Service sent BLM a memorandum containing a species list of endangered, threatened, and candidate species that may occur in or near the proposed Kane Springs Valley Groundwater Development Project (Service File No. 1-5-06-SP-499).

On July 12, 2007, BLM sent the Service a memorandum requesting formal consultation on the Kane Springs Valley Groundwater Development Project for potential adverse effects to the desert tortoise and its designated critical habitat. A BA accompanied the memorandum.

Field Manager

File Nos. 84320-2008-F-0007 and
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On September 4, 2007, the Service sent BLM a memorandum recommending formal consultation for the Moapa dace and requesting additional information necessary to initiate formal consultation for the desert tortoise (Service File No. 1-5-07-F-558).

On September 27, 2007, BLM sent the Service a memorandum requesting formal consultation on the project for potential adverse effects to the desert tortoise and its designated critical habitat and the Moapa dace. A revised BA accompanied the memorandum.

On October 19, 2007, the Service sent BLM a memorandum that initiated formal consultation on September 28, 2007, since the revised BA contained sufficient information (Service File No. 84320-2008-F-0007).

On December 4, 2007, BLM, the Service, and the project proponent participated in a conference call to discuss several topics including the monitoring wells that are required by the stipulated agreement among LCWD, VWC, and the Service for withdrawal of the Service's protests of water rights applications in Kane Springs Valley. It was decided that the BA would include acreages and potential effects associated with the two new monitoring wells.

On December 6, 2007, ARCADIS, the project consultant, sent the Service a revised BA on behalf of BLM, which included acreages associated with the two new monitoring wells.

On January 28, 2008, the Service sent BLM a memorandum extending the consultation period for this project by 60 days due to a substantial consultation workload.

On June 17, 2008, VWC sent the Service comments on the terms and conditions of the draft biological opinion.

On June 18, 2008, the Service provided BLM a copy of a draft biological opinion via email.

On June 30, 2008, a Memorandum of Understanding (MOU) among LCWD, VWC, and the Service was signed. Pursuant to the MOU, the Service will issue a biological opinion for the project which will include an incidental take statement authorizing such take of Moapa dace as may occur in connection with the pumping and transfer of 1,000 acre-feet of groundwater under Phase I of the Project and implementation of the Monitoring, Management and Mitigation Plan. Upon receiving authorization from the Nevada State Engineer to appropriate more than 1,000 and up to 5,000 acre-feet per year of groundwater from the Kane Springs Valley for use in the Coyote Springs Valley, the Service will reinitiate consultation for the project pursuant to section 7 of the Act.

On July 15, 2008, the Service received a copy of BLM's comments on the draft biological opinion via email.

On July 28, 2008, the Service and BLM met to discuss the draft biological opinion.

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On August 18, 2008, BLM sent the Service proposed language for term and condition 4.d. and 5. of the biological opinion via email.

On October 1, 2008, BLM sent the Service updated proposed language for term and condition 4.d. of the biological opinion via email.

On October 1, 2008, the Service and BLM met to discuss deposition of remuneration fees for offsetting desert tortoise habitat loss.

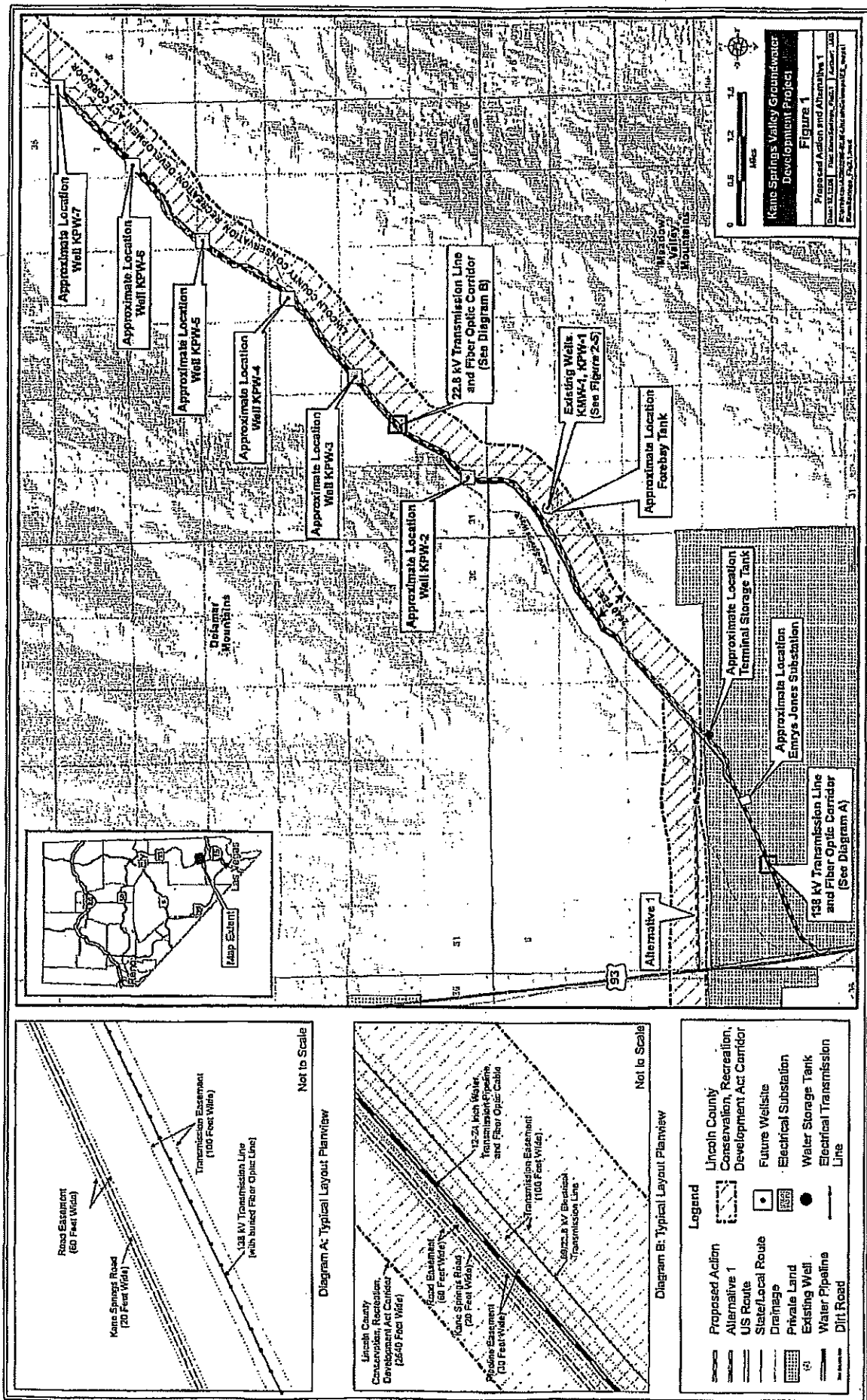
BIOLOGICAL OPINION

A. Description of the Proposed Action

The purpose of the proposed action is to develop a system for tapping groundwater resources in the Kane Springs Valley Hydrographic Basin for municipal water purposes within the Coyote Spring Valley Hydrographic Basin. The project proponents applied to the Nevada State Engineer's Office for 17,375 acre-feet per year (afy), but to date have been granted 1,000 afy under Ruling # 5712. The proposed pipeline would have capacity to transport up to 5,000 afy. Construction and operation of the proposed action would supply a small, but initially substantial portion of the total water requirements for the Coyote Springs Investment (CSI) development projects in southern Lincoln County. The majority of the proposed facilities would be located along or near the Kane Springs Road, within the 2,640-foot wide Lincoln County Conservation, Recreation, and Development Act (LCCRDA) utility corridor on public land, or on private land owned by CSI. The project area extends approximately 16.6 miles along Kane Springs Road from the intersection with US 93 (US 93).

The proposed action consists of several components including, groundwater production wells, monitoring wells, water pipelines, storage tanks, power transmission lines and substations, access roads and a fiber optic line. Figure 1 shows the approximate location of the project components in the lower Kane Springs Valley. LCWD is developing this project in cooperation with Lincoln County Power District (LCPD) Number 1 and Lincoln County Telephone Company. Each utility agency is responsible for the construction, operation, and rehabilitation of disturbed land associated with their utility. Each utility agency may be required to apply for a separate right-of-way with BLM.

Although the BA included the construction of the Emrys Jones Substation and power line west of the Substation, LCPD is constructing these facilities under another project, the Coyote Springs Transmission Line Project. Therefore, these facilities are not considered to be part of the proposed action for this consultation.



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1. Project Features

a. Wells

Groundwater from the Kane Springs Valley Hydrographic Basin would be supplied to the Coyote Spring Valley area from up to seven groundwater production wells. All production wells would be located within the LCCRDA corridor on public land, spaced approximately 1.3 to 1.8 miles apart. The first well (KPW-1), approved under BLM Serial Number NVN-079630, was drilled in 2005. Each wellhead would be enclosed in a masonry block structure, which would also contain all aboveground piping, shutoff valve, check valve, flow meter, air release valve, and electrical equipment. The size of each fenced well yard would be approximately 150 feet by 150 feet. Production wells would be equipped with an electric pump.

An existing monitoring well, KMW-1, is located adjacent to KPW-1 (Figure 1). The monitoring well was installed in 2005 to assist in assessing the hydrogeology of the Kane Springs Valley Hydrographic Basin. Two new monitoring wells may also be installed per the stipulated agreement for withdrawal of the Service's protests of LCWD and VWC's water rights applications in Kane Springs Valley. The wells would be placed on CSI land and would each have a footprint of less than 1 acre in size. The final location would be coordinated through the Technical Review Team (TRT) established under the stipulated agreement. Should the TRT decide that these monitoring wells are not necessary, funds for the material and construction of the monitoring would be used instead for Moapa dace conservation.

b. Pipelines

There are two types of pipelines associated with the proposed action: the well field pipeline collection system and the main transmission pipeline. Ancillary pipeline components include isolation valves, cathodic protection, control valves, air release/vacuum valves, blow-off valves, access manways, fiber optic splice vaults, and pipe alignment markers.

The well field pipeline collection system would consist of individual branch pipelines from each well to a single main collection pipeline terminating at the forebay storage tank. The total pipeline collection system would extend approximately 9.4 miles. The pipeline, to be constructed of ductile iron, would vary in size (telescope) from 12 inches to 24 inches in diameter, with the largest diameters located closest to the forebay storage tank. The pipeline would be buried to a minimum depth of three feet below grade, or three times scour depth in washes in accordance with engineering requirements. In general, the pipeline would parallel the Kane Springs Road to the south, with a 60-foot wide construction easement and a 30-foot wide permanent easement. If cross-country construction is required, the temporary construction easement would be 75 feet wide, with a permanent easement of 60 feet.

Approximately 3.8 miles of buried 24-inch diameter transmission pipeline would be constructed adjacent to the Kane Springs Road between the forebay storage tank and the terminal storage tank. Appurtenant groundwater facilities (e.g., isolation valves, control valves) would occur, on

Field Manager

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average, every mile along the alignment. These facilities would be located predominantly below existing grades in traffic-rated, lockable, concrete vaults that would vary in dimension. Typically, these vaults would be located outside of traffic areas and may require small location markers extending several feet above the surface of the ground.

c. Storage Tanks

A 50,000-gallon forebay storage tank would be installed adjacent to the existing production well (KPW-1) and would initially serve as the termination point for the groundwater collection system. This tank would be used to normalize flow pressures in the system and provide storage for secondary lifting to the terminal storage tank, if required. The water level in the forebay storage tank would control the operation of the well field via telemetry. Either wireless telemetry or direct-burial fiber optic telemetry cable located in pipeline trenches would enable communication between the collection system, forebay storage tank, and the terminal storage tank.

A terminal water storage tank would ultimately be located at the southern end of the water transmission pipeline to receive the imported water and to serve as a water distribution source for the northern Coyote Spring Valley area. The storage tank would be constructed with a maximum capacity of 700,000 gallons, subject to final design requirements.

d. Power Distribution

In order to provide reliable electric service to the well fields, LCPD would construct and operate transmission lines and substations. Power facilities built for this project would connect to the Emrys Jones Substation, part of the Coyote Springs Transmission Line Project.

Under the proposed project, LCPD would construct an overhead transmission line with a 69 kV/22.8 kV distribution circuit from the Emrys Jones Substation to the proposed well fields along the Kane Springs Road, parallel to the pipeline. A total of 14 miles of transmission line would be installed. The 69 kV/22.8 kV transmission line would be a single-circuit line supported by wood pole structures. The 69 kV/22.8 kV transmission line would primarily be located on public lands managed by BLM, with a short section near the Emrys Jones Substation located on private property. Each wood pole structure would require a temporary construction easement of 0.07 acre and after construction, each structure would occupy 0.02 acre. The transmission line would have a 100-foot permanent easement.

At each well location, a fenced power substation (approximately 155 feet by 95 feet) would be constructed to serve the well pump motor and ancillary equipment. The substation yards would consist of a 69 kV/22.8 kV to 4.16 kV pad-mounted step-down transformer, primary metering, switch cabinet, capacitor bank, and a station service transformer.

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84320-2008-I-0216*e. Fiber Optic*

The Lincoln County Telephone Company is proposing to install fiber optic cables within the proposed project right-of-way. The fiber optic line would be buried in the same trench as the pipeline and adjacent to the 138 kV transmission line on private lands proposed under the Coyote Springs Transmission Line Project. The fiber optic cables would be used for communication to manage the pipeline operation. The fiber optic cables would tie into an existing fiber optic line located on the east side of US 93.

f. Additional Project Components

Approximately 50 acres may be used for temporary extra work spaces. These areas would be spaced approximately 0.5 mile apart and would cover approximately 2 acres. Some larger staging areas may be sited in suitable areas near steeply incised drainages, above and below slopes where construction is expected to be difficult, and at pipe laydown areas. All extra work spaces on Federal lands would be located within the project right-of-way. Staging areas on private lands would be used during construction for storage of materials and equipment, construction office trailers, fuel storage, equipment maintenance, stockpiling and handling of excavated material, and other construction-related activities. Following construction, the staging areas would be restored as described in the Kane Springs Valley Groundwater Development Project Environmental Impact Statement (EIS).

g. Road Access and Transportation

US 93 and the Kane Springs Road would provide primary access into the project area. Spur roads would be constructed from the Kane Springs Road to temporary and permanent facilities sites, such as contractors' yards, well fields, and power pole locations, within the project right-of-way corridor. The number of new spur roads would be held to a minimum, consistent with their intended use (e.g., facility construction, conductor stringing and tensioning). It is estimated that seven new minor access roads would be required to access the proposed well houses. Each of these roads would be approximately 100 feet long and 12 feet wide. Access roads not required after construction would be removed and restored to their approximate original contour and dimensions and made to discourage vehicular traffic. All temporary road surfaces would be ripped or harrowed to establish conditions appropriate for reseeding, drainage, and erosion prevention.

Table 1 lists the estimated temporary and permanent disturbance acreage required for construction and operation of the proposed project. The estimated disturbance acreage is based on preliminary engineering plans and therefore may change slightly.

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| Table 1 Estimated Surface Disturbance by Land Ownership (at full buildout of the proposed project) | | |
|---|-------------------------------|-------------------------------|
| | Temporary (acres)* | Permanent (acres)* |
| Federal (BLM) | | |
| Well House and Well Substation | 3.2 | 3.0 |
| KPW-1 Well, Forebay Tank, KMW-1 Well | 0.3 | 1.0 |
| Pipeline Construction right-of-way | 148.7 | 0.0 |
| Terminal Storage Tank | 0.0 | 0.0 |
| Electrical Substation | 0.0 | 0.0 |
| Electrical Transmission Line | 14.8 | 5.0 |
| Electrical Transmission Line Access Roads | 0.0 | 8.0 |
| Fiber Optics Line | 0.0 | 0.0 |
| Subtotal | 167.0 | 17.0 |
| Private | | |
| Well House and Well Substation | 0.0 | 0.0 |
| KPW-1 Well, Forebay Tank, KMW-1 Well | 0.0 | 0.0 |
| Pipeline Construction right-of-way | 0.0 | 0.0 |
| Terminal Storage Tank | 0.7 | 0.3 |
| Electrical Substation | 0.0 | 0.0 |
| Electrical Transmission Line | 2.4 | 1.1 |
| Electrical Transmission Line Access Roads | 0.0 | 0.7 |
| Fiber Optics Line | 14.2 | 0.0 |
| Two Groundwater Monitoring Wells | 4.0 | 2.0 |
| Subtotal | 21.3 | 4.1 |
| Total | 188.3 | 21.1 |

h. Construction Procedures

Each utility agency would conduct all activities associated with the construction, operation, and rehabilitation of temporarily disturbed areas within the authorized limits of their BLM right-of-way. To supply electrical power to the well fields, it is anticipated that LCPD would be the first utility agency to begin construction after all approvals have been acquired. During construction activities, water would be used to suppress dust in the construction area.

Construction of the electric transmission lines and substation would involve the following general sequence: engineering surveys and staking, clearing and grading, material storage and handling, creation of structure holes or foundations, structure assembly and erection, installation of security fencing around substation, post construction cleanup and reclamation, and construction monitoring. Construction of the overhead lines would be completed in two phases: setting the pole structures and installing the cable. The setting of the pole structures is accomplished with a single multi-purpose truck. The truck has a small crane suitable for lifting and placing poles. A pole trailer is towed behind the crane truck to transport the poles to the

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installation site. Affixed to the crane is an auger for boring the holes for the pole structures. Soil excavated during construction would be used for backfill and for restoration of disturbed areas. The cable would be installed using two vehicles: a cable truck and a truck with a power lift. The cable would be strung out along the installation route and the man lift would be used to place the cable on the pole structure.

Construction of the groundwater facilities and fiber optic line would involve the following sequence: engineering surveys and staking, topsoil salvage and storage, clearing and grading (including access road construction), trenching and blasting, pipeline stringing/installation, installation of fiber optic line in common pipeline trench, backfilling, hydrostatic testing, re-grading, post-construction cleanup, and reclamation, and construction monitoring. Trenching would consist of excavating the trench using either a trenching machine or track-mounted excavator. In general the bottom of the trench would be five feet wide and up to six feet deep to provide the required cover over the top of the installed pipe. In areas of weathered rock, track-mounted excavators may be preceded by a bulldozer equipped with a single-shank ripper. Limited blasting may be required in areas where shallow or exposed bedrock is present. This project would be constructed utilizing a "Dig and Lay" procedure. In other words, a portion of trench would be dug, the pipe would be laid, welded, and back filled and another segment would begin. There would be minimal (less than 500 feet) open trench at any one time and the backfill would occur almost immediately following pipe installation.

i. Operation and Maintenance

The electrical facilities would be in continuous operation and water facilities would be operated and maintained to ensure safe operation and integrity of the pipeline. Periodic inspection and maintenance of power and water facilities would be required. If a pipeline break were to occur, immediate steps would be taken to isolate the break, the break would be repaired, and the trench backfilled. Areas would be contoured and revegetated after these types of repairs. Emergency maintenance of power lines, such as repairing downed wires and correcting unexpected outages would be performed by LCPD.

j. Project Phases

Construction of the project would occur in three phases, with one to three years between phases. Phases would correspond to demand for water and issuance of permits for additional water rights. Eventually LCWD would like to harvest 5,000 afy from the carbonate aquifer within the Kane Springs Valley Hydrographic Basin but so far has been granted an appropriation of 1,000 afy by the Nevada State Engineer. This appropriation granted four points of diversion, which constitutes the initial production under Phase 1 of the project. If additional appropriations are granted, production from Phase 1 wells could be increased, and Phase 2 and Phase 3 wells could be developed.

- Construction of Phase 1 would occur over a 90- to 180-day period and would begin upon completion of environmental reviews and the acquisition of necessary permits

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and approvals. Phase 1 water facilities would include the transmission pipeline (main water line) and approximately 9.4 miles of well field collection pipelines for up to four wells (main collection plus laterals to wells), up to four production wells, the storage tanks, and up to two monitoring wells. Power facilities would include 14 miles of 69 kV/22.8 kV overhead power lines and up to four smaller substations to serve each well.

- Construction of Phase 2 would occur over a 30- to 60-day period. Phase 2 water facilities would include one to two production wells and lateral pipelines from these wells to the main collection pipeline (combined length of the two lateral pipelines is expected to be less than 1 mile). Power facilities would include 22.8 kV underground power lines from the main transmission line to the substation(s) and one to two smaller substations to serve the new well(s).
- Phase 3 construction would only occur if production from Phase 1 and Phase 2 were insufficient to meet anticipated demand or if production from previous wells were lower than estimated or designed. Phase 3 facilities and construction times are similar to Phase 2.

2. State Engineer Ruling

On February 2, 2007, the Nevada State Engineer issued Ruling 5712, which granted 1,000 afy of groundwater from the Kane Springs Valley Hydrographic Basin to LCWD and VWC for municipal purposes within the Coyote Spring Valley Hydrographic Basin. Specifically 500 afy was granted under Application 72220 and applications 72218, 72219, and 72221, were granted for a total combined duty of 500 afy.

The State Engineer concluded that to permit the appropriation of water in an amount greater than permitted under this ruling would conflict with existing rights and threaten to prove detrimental to the public interest. After reviewing the existing information, the State Engineer concluded that a small amount of water can be developed in the Kane Springs Valley and not unreasonably impact existing rights in the discharge areas of the White River carbonate-rock aquifer system, which are already fully appropriated. The State Engineer found that no water has been previously appropriated in the Kane Springs Valley Hydrographic Basin and by limiting the quantity of water authorized for appropriation the potential impacts to existing waster rights in down-gradient hydrographic basins would be minimized.

3. Proposed Minimization Measures for Desert Tortoise (Mojave population)

- a. The applicant will implement an Environmental Training Program. Prior to beginning work, all contractor personnel assigned to the field for construction-related activity will attend a mandatory one-time Worker Environmental Training Program presented by the project developer's Environmental Compliance Team. The presentation will review topsoil salvage, access restrictions, general site restrictions, and other environmental

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requirements regarding the project. Participants will sign a statement declaring that they understand and will abide by any guidelines set forth in the material presented.

- b. All areas around structures will be backfilled, compacted, and returned as close as possible to the original condition and grade.
- c. Signs will be placed along the access roads to discourage off-highway vehicle use of adjacent areas.
- d. Clearance surveys will be performed prior to any construction activities within the right-of-ways. Any tortoises located will be handled and relocated by a qualified tortoise biologist in accordance with Service-approved protocol (Desert Tortoise Council 1994, revised 1999). Burrows containing tortoises or nests will be excavated by hand, with hand tools, to allow removal of the tortoise or eggs. Desert tortoises moved during the tortoise inactive season or those in hibernation, regardless of date, must be placed into an adequate burrow; if one is not available, one will be constructed in accordance with Desert Tortoise Council (1994, revised 1999) criteria. During mild temperature periods in the spring and early fall, tortoises removed from the site will not necessarily be placed in a burrow. Tortoises and burrows will only be relocated to federally managed lands. If the responsible Federal agency is not BLM, verbal permission, followed by written concurrence, will be obtained from BLM and the Service before relocating the tortoise or eggs to lands not managed by BLM.
- e. Construction monitoring will employ a field contact representative, authorized biologist(s), and qualified biologist(s) during construction activities except in those areas with high disturbance. The Service employs a specific set of guidelines for such monitoring.
- f. Tortoises requiring moving will only be handled by the authorized and qualified tortoise biologist or other trained personnel approved by the Service and the Nevada Department of Wildlife (NDOW).
- g. A 25 mile per hour (mph) project access road speed limit will be enforced for all project vehicles and personnel.
- h. The area limits of project construction and survey activities would be predetermined based on the temporary and permanent disturbance areas noted on the final design engineering drawings to minimize environmental effects arising from the project, with construction activities and traffic restricted to and confined within those limits.
- i. Littering is not allowed. Project personnel would not deposit or leave any food or waste in the project area, and no biodegradable or non-biodegradable debris would remain in the right-of-way following completion of construction.

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- j. No wildlife, including rattlesnakes, may be harmed except to protect life and limb.
- k. Project personnel are not allowed to bring pets to any project area in order to minimize harassment or killing of wildlife and to prevent the introduction of destructive animal diseases to native wildlife populations.
- l. Wildlife species may not be collected for pets or any other reason.
- m. Project supplies or equipment where wildlife could hide will be inspected prior to moving or working on them, to reduce the potential for injury to wildlife. Supplies or equipment that cannot be inspected or from which wildlife cannot escape or be removed, will be covered or otherwise made secure from wildlife intrusion or entrapment at the end of each work day.
- n. All steep-walled trenches or excavations used during construction will be inspected twice daily (early morning and evening) to protect against wildlife entrapment.
- o. All new access roads constructed as part of the project that are not required as permanent access for future project maintenance and operation would be permanently closed to minimize impacts from increased public access.
- p. To minimize perching opportunities for raptors near habitats supporting sensitive prey species, structures incorporating a design to discourage raptor perching will be selected.
- q. Only the minimum amount of vegetation necessary for the construction of structures and facilities will be removed. Topsoil will be conserved during excavation and reused as cover on disturbed areas to facilitate re-growth of vegetation.
- r. Construction holes left open overnight will be covered. Covers will be secured in place nightly, prior to workers leaving the site, and will be strong enough to prevent livestock or wildlife from falling through and into a hole.
- s. Holes and/or trenches will be inspected prior to filling to ensure absence of mammals and reptiles.
- t. Where necessary, a biological resource monitor shall be present during the construction to ensure resources are protected in the construction area.
- u. Excavations will be sloped on one end to provide an escape route for small mammals and reptiles.
- v. A revegetation plan will be developed and implemented for the project which describes procedures the LCWD and its contractors would use to conduct revegetation of the disturbed areas. The Plan describes seedbed preparation; seed mixtures; seeding,

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salvaging, and transplanting methods; revegetation schedule; post-construction monitoring; evaluation of revegetation success; remediation; and reporting.

- w. A noxious weed management plan will be developed and implemented for the project which includes site-specific measures that LCWD and its contractors would implement to control noxious weeds including, but not limited to, the use of cleaned, weed-free equipment, pressure washing of all vehicles and equipment prior to arrival at the work site, and the use of certified weed-free straw/hay bales to control erosion. A key element of the noxious weed management plan is to identify and treat existing weed infestations prior to construction.
- x. A fire mitigation plan will be developed and implemented for the project which identifies measures to be taken during construction, operation, and maintenance of the project facilities to prevent and suppress fires. The purpose is to establish standards and practices to minimize the risk of fire or, in the event of fire, to implement immediate suppression procedures.

4. Proposed Minimization Measures for Moapa Dace

On August 8, 2006, the Service entered into a stipulated agreement with LCWD and VWC for water rights applications in the Kane Springs Valley Hydrographic Basin, then under review by the Nevada State Engineer's Office. The Service agreed to withdraw its protests for the granting of these water rights in exchange for the parties agreeing to implement the Monitoring, Management, and Mitigation Plan which would help protect senior Federal water rights in the Muddy River Springs/Warm Springs Area from unreasonable adverse impacts from groundwater pumping. The common goal of the parties is to manage the development of the LCWD and VWC water rights in their entirety from the Kane Springs Valley Hydrographic Basin, without resulting in any losses to senior water rights or unreasonable adverse impacts to Federal water resources.

The Monitoring, Management, and Mitigation Plan lists monitoring requirements in relation to the production wells, two new monitoring wells, elevation control and springflow, water quality, data quality, and reporting. The management requirements include action criteria to help to maintain minimum in-stream flows in the Warm Springs Area in order to protect and recover the Moapa dace. The parties agreed to the following, summarized from the Plan:

- a. The Average Flow Level shall be determined by flow measurements at Warm Springs West flume. See the Plan for the definition of Average Flow Level.
- b. If the Average Flow Level decreases to an amount within the Trigger Range of 3.2 cubic feet per second (cfs) or less, the parties agree to meet as soon as practically possible to discuss and interpret all available data and plan for mitigation measures in the event that flows continue to decline.

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- c. If the Average Flow Level is within the Trigger Range of 3.15 cfs or less but greater than 3.0 cfs, LWCD and VWC agree to reduce pumping from all wells in Kane Springs Valley by 50 percent or to a pumping level not greater than 2,500 afy, whichever results in the lesser amount of pumping, until the Average Flow Level exceeds 3.15 cfs. The subsequent State Engineer ruling limited pumping to 1,000 afy. Accordingly, under this scenario, LCWD and VWC would be required to reduce pumping by 50 percent.
- d. If the Average Flow Level is within the Trigger Range of 3.0 cfs or less, LWCD and VWC agree to cease pumping from all wells in Kane Springs Valley until the Average Flow Level exceeds 3.0 cfs. However, if LWCD and VWC, together with CSI, effectuate a reduction in the quantity of water, CSI would have otherwise been entitled to pump in a given year from wells within the Coyote Spring Valley, then LWCD and VWC shall have the right to pump a like quantity of water from wells within Kane Springs Valley in that year.

The management requirements also include the establishment of a TRT with two representatives each from LCWD/VWC and the Service. The objectives of the TRT include reviewing existing data, making recommendations concerning the monitoring efforts required by this Plan, and determining whether other criteria, such as water levels in the monitoring wells, are a better indicator of potential effects of the pumping wells on the springs in the Muddy River Springs/ Warm Springs Area. As part of their commitment to the recovery of the Moapa Dace, LCWD and VWC will commit annual funds for a period of five years following the granting of the water rights applications, for the restoration of Moapa dace habitat outside the boundaries of the Moapa Valley National Wildlife Refuge (NWR).

B. Definition of the Action Area

The action area is defined as all areas to be affected directly or indirectly by the Federal action, including interrelated and interdependent actions, and not merely the immediate area involved in the action (50 CFR § 402.02). Subsequent analyses of the environmental baseline, effects of the action, cumulative effects, and levels of incidental take are based upon the action area as determined by the Service.

For the desert tortoise and its designated critical habitat, impacts will be tied to the project area and a zone-of-influence extending 0.5 miles (2,400 feet) beyond the project area to cover potential effects to desert tortoises that could move into construction areas or onto access roads.

For the Moapa dace, which depends on thermal springs in the Warm Springs Area for survival, the action area includes the Kane Springs Valley Hydrographic Basin and the hydrographic basins down gradient of this basin in the White River Groundwater Flow System that are hydrologically connected to the Muddy River ecosystem. These hydrographic basins are the Coyote Spring Valley (Basin 210) and Muddy River Springs Area (Basin 219). The Service acquired the Moapa Valley NWR to secure habitat and assist the recovery efforts for the endangered Moapa dace, a species restricted to the Warm Springs Area and the mainstem of the

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upper Muddy River. Springs in this area are considered regional discharge points for the carbonate aquifer of the White River Flow System.

C. Status of the Species- Rangewide

1. Desert Tortoise (Mojave population) and Designated Critical Habitat

The current rangewide status of the desert tortoise and its critical habitat consists of information on its listing history, species account, recovery plan, recovery units, distribution, reproduction, and numbers, and critical habitat units and their constituent elements. This information is provided on the Service's website at: <http://www.fws.gov/nevada>. If unavailable, contact the Nevada Fish and Wildlife Office in Las Vegas at (702) 515-5230 and provide File No. 84320-2008-F-0007.

2. Moapa Dace

See the description in the Intra-Service Programmatic Biological Opinion for the Proposed Muddy River Memorandum of Agreement Regarding the Groundwater Withdrawal of 16,100 afy from the Regional Carbonate Aquifer in the Coyote Spring Valley and California Wash Basins and Establishment of Conservation Measures for the Moapa Dace, Clark County, Nevada (Service 2006c) (File No. 1-5-05-FW-536). Updated information on the Moapa dace is provided below.

Warm Springs Natural Area

In September 2007, Southern Nevada Water Authority (SNWA) purchased 1,179 acres of private property that encompasses several springs in the Muddy River headwaters area, including the former Warm Springs Ranch. The property includes 3.8 miles of the mainstream Muddy River. The Warm Springs Natural Area is to be managed as a nature preserve for protection of Moapa dace; and restoration and management of the areas as an ecological reserve.

Current Distribution and Abundance

Moapa dace surveys have been conducted annually throughout the upper Muddy River system. Dace surveys conducted semi regularly between 1994 and 2006 indicate Moapa dace numbers range between 1,296 and 3,825 individuals. The 2007 survey data indicate that there were approximately 1,172 fish in the population that occurred throughout 5.6 miles of habitat in the upper Muddy River system. Approximately 97 percent of the total population occurred within one major tributary that included 1.78 miles of spring complexes that emanate from the Pedersen, Plummer, and Apcar spring complexes on the Moapa Valley NWR and their tributaries (upstream of the gabion barrier). Approximately 48 percent of the population was located on the Moapa Valley NWR and 48 percent occupied the Refuge Stream supplied by the Pederson-Plummer springs. The highest densities of Moapa dace occurred on the Moapa Valley NWR's Plummer and Pedersen units.

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In 2008, there was an approximately 60 percent decrease in the number of Moapa dace, from 1,172 fish in 2007 to 460 in 2008. Most of this decline is due to large changes in the numbers of dace in the Pederson, Plummer, and Refuge Stream areas which supported more than 92 percent of the population in 2007. The cause of the population decline is currently unknown, although beavers have recently changed stream characteristics in the Refuge Stream and vegetation management occurred along the Pederson Unit. In addition, habitat restoration projects have been implemented over the past few years in the Pederson and Plummer units of the Moapa Valley NWR, restoring the streams to a more natural state to augment Moapa dace habitat and populations.

D. Environmental Baseline

1. Status of the Listed Species/Critical Habitat in the Action Area

a. *Desert Tortoise (Mojave Population) - Status within the Action Area*

The action area occurs in the Mojave Desert Scrub Biome (Turner 1982), along the Kane Springs Road located in the valley between the Meadow Valley Mountains to the south and the Delamar Mountains to the north. The project area crosses Kane Springs Wash, which flows southwest to its confluence with the Pahrnagat Wash in the northern part of the Coyote Spring Valley, in several locations. The vegetation in the action area consists of creosote bush scrub and desert wash scrub along Kane Springs and Pahrnagat washes. Elevations in the action area range from approximately 2,600 to 3,300 feet.

Between October 16 and 18, 2006, Greystone-ARCADIS biologists conducted desert tortoise presence-absence surveys in the project area for BLM (ARCADIS 2007). Evenly spaced along the project area were 18, 1.5 mile long by 10 yard wide triangular strip transects. Transects were surveyed for live or dead desert tortoise, and any tortoise sign including burrows, scat, tracks, and water scrapes. The total corrected sign method was used to estimate tortoise densities. Estimated tortoise densities ranged from 10 to 0 tortoises per square mile. No live tortoises were found and most of the tortoise sign was comprised of burrows and water scrapes. The highest tortoise densities were 10 per square mile at 3 transects, and 7 per square mile at 3 transects. The remainder of the transects had densities of 5 per square mile or less. No desert tortoise sign were found in the two transects that overlapped with a wildfire perimeter from 2005 at the northeast end of the project area. Over the project area, tortoise densities average 4 desert tortoises per square mile. Densities in the project area are therefore estimated to be very low.

Recent surveys have been conducted in the Coyote Spring Valley as part of the rangewide population monitoring program. Survey data from 2005 line-distance sampling in the Coyote Spring Valley, which includes transects in the CSI private and lease lands located in the Mormon Mesa Critical Habitat Unit (CHU), estimate the tortoise densities in the valley to be 8.3 tortoises per square mile (Service unpublished data). Over the first five years of line-distance sampling monitoring, tortoises were least abundant in the Northwest Mojave Recovery Unit (2 to 8 tortoises per square mile) as compared to other recovery units (Service 2006b). Tortoise

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densities in the Coyote Spring Valley are therefore among the highest in the recovery unit. These results are preliminary and additional analysis is needed, incorporating 2006 and 2007 survey results. Desert tortoise clearance surveys were conducted in 2006-2007 in the southern part of the Coyote Spring Valley. One hundred percent clearance surveys were conducted on 5,302 acres of CSI private lands in Clark County as of January 2008. Based on the total number of tortoises cleared during surveys (108 adults and juveniles), we estimate a density of around 13 tortoises per square mile on the CSI private lands in Clark County.

Older desert tortoise survey data exists for the action area including BLM strip triangle surveys and the Coyote Springs Permanent Study Plot (PSP). Prior to 1991, BLM surveyed for tortoises using the strip triangle method, recording all tortoise sign within approximately 5 meters (15 feet) of the transect and estimating species density based on methods described by Karl (1981) for southern Nevada. Densities within one half mile of Kane Springs Road ranged from high to very low. Densities averaged medium (45 - 90 tortoises per square mile) and low (10 - 45 tortoises per square mile) over the project area. Densities on the northeast part of the project area were very low (0 - 10 tortoises per square mile). It appears that densities have declined somewhat since 1991.

The closest 1-square-mile PSP to the project area is the Coyote Spring plot, which is located 1.9 miles east of US 93 and 1.9 miles north of Kane Springs Road. This plot was established in 1986 and resurveyed in 1992 and 1995. EnviroPlus Consulting (1995) characterized this site as having moderately high tortoise numbers, with a size distribution typical of that observed on other PSPs and a significantly skewed sex ratio with female tortoises comprising two-thirds of the observed sub-adult and adult population (however, this effect was not significant for tortoises >208 mm mid-carapace length). Over the three survey periods, total estimated population size on the plot ranged from 96 ± 31 to 116 ± 29 (Esque 1986, Converse Environmental Consultants Southwest, Inc. 1992, EnviroPlus Consulting 1995). This is considerably higher than densities in the action area. The annual adult mortality rate for the Coyote Spring plot in 1995 was estimated at 4 percent, which is higher than the 2-3 percent rate that the Service believes necessary to sustain desert tortoise populations (Service 1994). However, the tortoise population at the Coyote Spring PSP was apparently stable over the 10 years that the surveys spanned (EnviroPlus Consulting 1995).

Tortoises with symptoms of cutaneous dyskeratosis and URTD were observed during plot surveys; however, comparisons across survey periods are unreliable due to differences in diagnosis/evaluation criteria used to evaluate health status. In 1995, approximately one-third of tortoises had trauma-related injuries, likely caused by a predator. Overall, mortality by predation was characterized as present, but not at a high rate. Human impacts on tortoise populations in this area were considered low and inconsequential (EnviroPlus Consulting 1995). The PSP is located in the northern part of the Coyote Spring Valley and BLM strip triangle survey data corroborates that this area north of the Kane Springs Road and east of US 93 has higher tortoise densities than the surrounding areas with several very high density (greater than 140 tortoises per square mile) and high density (90 - 140 tortoises per square mile) survey triangles.

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b. ***Desert Tortoise Critical Habitat - Status within the Action Area and the Mormon Mesa CHU***

The project area is located mostly within the 427,900 acre Mormon Mesa CHU of the Northeastern Mojave Recovery Unit for the desert tortoise. The primary vegetation community within the Mormon Mesa CHU is creosotebush-white bursage desert scrub, which in Nevada is found in broad valleys, lower bajadas, plains and low hills of the Mojave Desert. Shrub cover is sparse to moderately dense, consisting primarily of creosote bush (*Larrea tridentata*) and white bursage (*Ambrosia dumosa*) with a variety of different shrubs and cacti as co-dominants or understory species. Where poorly-drained soils with high salt and clay content are found on valley bottom floors, pockets of salt desert scrub community may be present, typified by one or more *Atriplex* species.

The CHU boundaries were based on proposed desert wildlife management areas (DWMAs) in the Draft Desert Tortoise Recovery Plan. The land management agencies have subsequently designated areas of critical environmental concern (ACECs) in each DWMA, where they are managing the land as reserves. In general, land management activities that may negatively affect the desert tortoise and its habitat such as domestic livestock grazing, grazing by wild burros and horses, commercial harvest of desert flora, and off-road vehicle use are mostly restricted or not allowed in these areas, as per Recovery Plan recommendations. The Mormon Mesa CHU contains the following ACECs: Kane Springs, Coyote Springs, and Mormon Mesa. The project area is in the Kane Springs ACEC.

CSI owns 29,055 acres of lands in Coyote Spring Valley, in Clark and Lincoln counties, Nevada, all of which is designated critical habitat for the desert tortoise. In addition CSI has a lease for approximately 13,767 acres of BLM-administered land in Coyote Spring Valley for 99 years. In Clark County, CSI is currently constructing a residential and golf community with associated commercial development on 6,881 acres of private land. Construction will occur over 25 years, with an eventual build out of 29,000 residential units, approximately 72,500 residents, and a visitor capacity equal to 14,500 residents (based on full-time equivalency). In Lincoln County, CSI proposes to develop 21,454 acres of private land over a 40 year period. It is estimated that there would be up to 111,000 residential units, resulting in an increase of population of 275,300 residents in Lincoln County. CSI plans to create a natural reserve on 13,767 acres of BLM leased land (approximately 7,548 acres in Lincoln County and 6,219 acres in Clark County).

EnviroPlus Consulting (1995) characterized the Coyote Spring PSP as having low historical and present-day human impact: Old Highway 93 was rarely used and had large shrubs growing through cracks in the pavement; little trash was observed on the plot; no power lines were present; no cattle or burros were observed; and while a few old two-track roads were discernible for short distances, none appeared to be recently made. Furthermore, this area was characterized as having somewhat variable but adequate tortoise habitat, with abundant forage and good soil for burrowing (EnviroPlus Consulting 1995).

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The Mormon Mesa CHU is highly fragmented with an extensive network of primarily unimproved and two-track roads. The Desert Tortoise Recovery Plan (companion document for proposed DWMA's, Service 1994), describes this area as having the highest density of roads and trails (1.3 linear miles per square mile) of any desert tortoise *crucial* habitat in southern Nevada based on a 1984 status report [crucial habitat was defined by BLM in the California Desert Plan (1980) as "...Portions of the habitats of sensitive species that if destroyed or adversely modified could result in their being listed as threatened or endangered pursuant to section 4 of the Act or in some category implying endangerment by a State agency or legislature."]. US 93 runs along the western edge and bisects the southwestern tip of the unit, providing a substantial barrier between the unit and protected tortoise habitat in the Desert NWR to the west. State Route (SR) 168 also runs through the western part of the CHU, and I-15 traverses the southeastern edge of the unit. Other well-established roads include the Kane Springs Road and the Carp-Elgin Road which bisects the unit. Powerlines, pipelines, and access roads dissect much of the area.

The 2005 wildfire season in southern Nevada was severe due in large part to the high bio-mass of flammable non-native annual grasses after above-average moisture conditions the previous winter. Approximately eight acres in the northeast part of the project area burned in 2005 in the Meadow Valley Fire, which burned approximately 148,000 acres overall, including a small amount of the Mormon Mesa CHU. In total, over 56 fires of various sizes in southern Nevada, southwestern Utah, and northern Arizona burned roughly 964,806 acres in the Northeastern Mojave Recovery Unit in 2005 including 15,559 acres (4 percent) within the Mormon Mesa CHU. The wildfire hazard in the Mormon Mesa CHU remains significant although fire activity in 2006 and 2007 was lower due to dryer conditions over the winter and spring. Monitoring of the 2005 fires in critical habitat being conducted by the U.S. Geological Survey (USGS) shows that proportionally less tortoise activity occurred in burned areas (treatment plots and control plots) compared to unburned reference plots.

The Mormon Mesa CHU is primarily in Federal ownership, administered by BLM. In addition to CSI's private lands, there are several small privately-held parcels along the Meadow Valley Wash that are within or adjacent to the CHU. Other privately-held lands or Federal land slated for disposal adjacent or near the Mormon Mesa CHU have the potential for future development. Land near the extreme southwestern tip of the Mormon Mesa CHU and northeast of Las Vegas is also in private ownership. Future development of these private lands, as well as possible future disposals of Federal land to allow for expansion of existing cities will create additional challenges for the Service and Federal lands managers in terms of management of the Mormon Mesa DWMA/ACEC, and conservation and recovery of desert tortoises in the Mormon Mesa CHU.

c. *Moapa Dace - Status within the Action Area*

The action area encompasses the entire range of the Moapa dace. Population numbers were discussed in detail in the section entitled "Status of the Species Rangewide, C. Moapa Dace;" thus, no further details are provided here. The relationship of the dace's habitat to groundwater is discussed in more detail below.

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84320-2008-I-0216**2. *Factors Affecting the Listed Species/Critical Habitat in the Action Area***

The action area is located primarily within the Kane Springs Valley, Coyote Spring Valley and Muddy River Springs Area hydrographic basins. These basins are part of the White River Groundwater Flow System, a regional groundwater flow system located in southern Nevada (Eakin 1966, Harrill *et al.* 1988, Prudic *et al.* 1993). The flow system consists of numerous local basin fill aquifers underlain by a large regional carbonate aquifer that transmits groundwater from basin to basin, beneath topographic divides. Groundwater inflow or recharge to the regional carbonate aquifer is primarily through precipitation. The terminal discharge of the White River Groundwater Flow System is most likely the Warm Springs in the Upper Moapa Valley, an area consisting of about twenty regional springs, with numerous seeps and wetlands. Since the Moapa dace is dependent upon these springs for survival it is important to discuss the hydrology of this area in more detail.

The source water supporting spring discharge in the Warm Springs Area is from the regional carbonate groundwater (62 percent) and from local recharge based on precipitation in the surrounding mountain ranges (BLM 2008). The production wells in the Kane Springs Valley that would be pumped under the proposed action are located about 20 miles northwest of the Warm Springs Area. The high permeability and transmissivity of the carbonate aquifer underlying the Kane Springs Valley and down-gradient Coyote Spring Valley could connect the proposed action to springs in the Warm Springs Area. Long-term effects from groundwater extraction could be propagated over great distances. Barriers to flow, such as faults or rock units with low permeability, also affect the extent of drawdown. There may be a break in the regional hydraulic gradient at the location of the Kane Springs Wash fault zone; however until additional long-term pumping data are obtained, the true relationship cannot be fully evaluated (BLM 2008).

a. *Existing Groundwater Rights and State Engineer Rulings in the Action Area:*

Groundwater wells within the Kane Springs Valley and Coyote Spring Valley Hydrographic Basins are associated with municipal, mining, industrial, commercial and irrigation use. Permitted diversion rates for existing wells vary from 145 to 7,242 afy. Within the Kane Springs Valley Hydrographic Basin, permitted water rights are limited to the LCWD/VWC applications recently approved by the State Engineer under Ruling 5712. The LCWD has an additional four groundwater applications pending before the Nevada State Engineer. Currently, in the Kane Springs Valley Hydrographic Basin permitted groundwater rights are 1,000 afy (BLM 2008).

In the Coyote Spring Valley Hydrographic Basin, groundwater rights filed with the Nevada State Engineer include 15 industrial use permits owned by SNWA, 4 municipal use permits owned by CSI, 1 industrial use permit owned by Nevada Power Company, and 4 permits owned by Bedrock Limited, LLC associated with sand and gravel mining operations. Bedrock Limited, LLC also has one vested application for irrigation use. Currently, in the Coyote Spring Valley Hydrographic Basin permitted groundwater rights are 16,304 afy (BLM 2008). There are 34 pending applications by Las Vegas Valley Water District (LVWD); CSI; Dry Lake Water, LLC;

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and Bedrock Limited, LLC in the Coyote Spring Valley Hydrographic Basin. A list of surface water and groundwater rights in the Kane Springs Valley and Coyote Spring Valley hydrographic basins is provided in Appendix D of the Kane Springs Valley Groundwater Development EIS (BLM 2008).

There are three Nevada State Engineer rulings that affect the withdrawal of groundwater in the action area. In these rulings the Nevada State Engineer has required "staged development," an incremental approach for phasing in development of the carbonate aquifer with adequate monitoring in cooperation with other parties in order to assist in assessing effects. This approach was adopted by the Nevada State Engineer "...in order to predict, through the use of a calibrated model, the effects of continued or increased development with a higher degree of confidence." Ruling 5712, granting 1,000 afy of groundwater from the Kane Springs Valley to LCWD and VWC was summarized in the section entitled "Description of the Proposed Action." The other two rulings are summarized below.

In Order 1169 issued in 2002, the Nevada State Engineer held in abeyance applications for new groundwater rights in the Coyote Spring Valley, Black Mountains Area, Garnet Valley, Hidden Valley, Upper Moapa Valley, and Lower Moapa Valley groundwater basins until a pump test is completed. All major water right holders in these basins (SNWA, LVVWD, Moapa Valley Water District [MVWD], CSI, and Nevada Power Company) were required to conduct a regional groundwater study, including the pumping of at least 50 percent of the permitted water rights within the Coyote Spring Valley hydrographic basin for a period of at least two consecutive years. Order 1169 is designed to evaluate how groundwater pumping activities in Coyote Spring Valley will impact water rights and the environment within the Warm Springs Area, including the Muddy River ecosystem. Data obtained from the study will be used to evaluate groundwater development activities within the regional carbonate groundwater system.

To date, there has been limited pumping of the permitted groundwater rights in Coyote Spring Valley. In 2005, CSI drilled and pump tested two wells in Coyote Spring Valley under Nevada Division of Water Resources permit numbers 70429 and 70430. Currently, CSI is monitoring and pumping water as needed for their development activities in Clark County.

In Ruling 4243 in the Muddy River Springs Area Hydrographic Basin, the Nevada State Engineer granted permits to MVWD for 5,800 afy from Arrow Canyon Well, but with pumping phased in over a 10-year period while monitoring surface water flows and groundwater levels in order to assess potential effects to wells and springs. Annual volume pumped is limited to annual demand, up to the maximum permitted. Annual pumping has consistently been less than the amount allowed in the ruling.

As of 2002, the Nevada State Engineer had granted a total of approximately 14,800 afy of groundwater permits for the alluvial and carbonate aquifer in the Muddy River Springs Area Hydrographic Basin (Service 2006c). Included in these are MVWD permits for the Arrow Canyon Well totaling 7,240 afy (1,440 afy prior to Ruling 4243 plus 5,800 afy from Ruling 4243) from the carbonate aquifer. To date, the actual pumping from the Arrow Canyon Well has

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been far less than the permitted volume. Approximately 2,400 afy has been pumped on average since 1998.

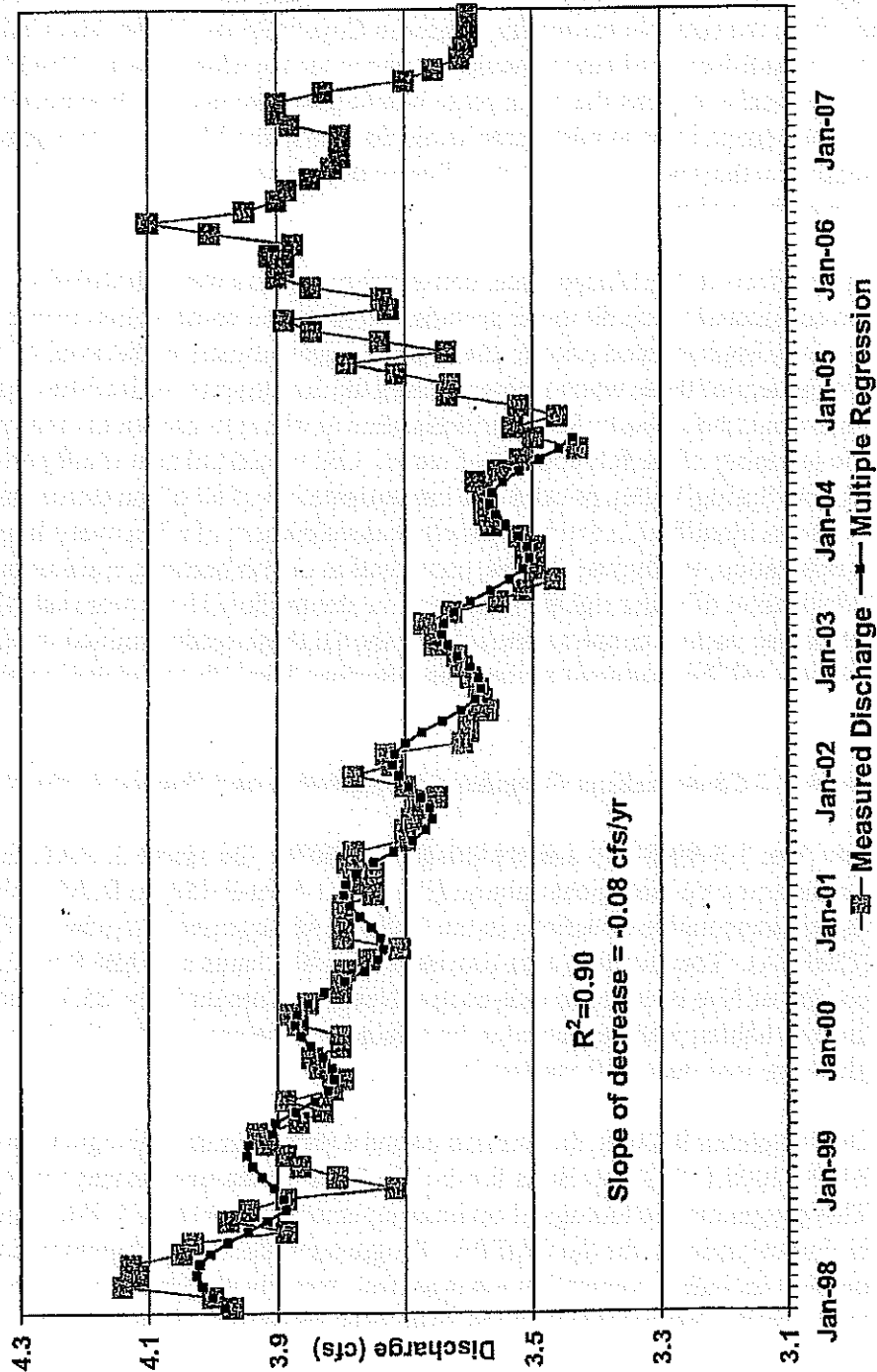
Concurrent with groundwater pumping between 1998 and 2004, groundwater levels and spring discharge in the Warm Springs Area consistently declined (Service 2006c). Over the same period, the total spring discharge from the Pedersen Unit, as measured at Warm Springs West, decreased from 4.00 cfs to 3.55 cfs (Service 2006c) (Figure 2). The discussion in Mayer (2004) shows that the observed decreases in spring discharge are consistent with expected decreases based on the two-foot decline in groundwater levels observed in the carbonate monitoring wells in the Warm Springs Area. The extremely wet winter of 2005 appears to have recharged the springs with monthly discharge peaking at 4.1 cfs in May of 2006, and decreasing since that time (Mayer 2008). This is expected to be a transient response but the timing and level of a return to equilibrium conditions is not known for certain. Discharge has currently declined to 3.6 cfs (USGS 2008).

The exact timing of the groundwater level decline is important because if the actual decline precedes in time any action or event suspected of causing the decline (such as increased pumping or drought), then this is strong evidence that there are other factors causing the decline. The Service (2006c) analyzed the timing of the decline as it was concerned about the rate and magnitude of the 1998 to 2004 decrease. The start of the decline coincides with MVWD's increased pumping from the carbonate aquifer. In order to address the possibility that drought caused the groundwater level declines, the Service (2006c) compiled precipitation records from a number of stations in the southeastern Nevada area. Their analysis showed that the decline from 1998 to 2004 was not likely to be drought-related. These declines observed between 1998 and 2004 have occurred not only locally in the Warm Springs Area, but have also occurred in monitoring wells 12 miles upgradient in Coyote Spring Valley and 15 miles south in monitoring

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Figure 3: Warm Springs West, Moapa Valley NWR - USGS Average Monthly Discharge, Apr 1998 to Dec 2007



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wells in the California Wash Basin, based on USGS monitoring well data and monitoring well data shared with the Service in July 2004 (Service 2006c).

On July 14, 2005, a Memorandum of Agreement (MOA) was signed by the SNWA, MVWD, CSI, Moapa Band of Paiutes (Tribe), and the Service, regarding groundwater withdrawal of 16,100 afy from the regional carbonate aquifer in Coyote Spring Valley and California Wash Basins, and establishment of conservation measures for the Moapa dace. The MOA outlined specific conservation actions that each party would complete in order to minimize potential impacts to the Moapa dace should water levels decline in the Muddy River system as a result of the cumulative withdrawal of 16,100 afy of groundwater from two basins within the regional carbonate aquifer system.

To minimize effects to the Moapa dace, conservation actions were identified in the MOA. In order to be considered a benefit to the species, the proposed conservation measures will be initiated or fully implemented prior to the proposed groundwater withdrawal of 16,100 afy. Since development of these water rights requires the construction of facilities, as identified above, there would be a two to five year timeframe in which to implement many of these actions prior to the pumping of the full amount of water. CSI would utilize a small portion of their water right in Coyote Spring Valley prior to full implementation of all of the conservation measures. The action items identified in the MOA include development of a Recovery Implementation Program, restoration, ecological studies, construction of fish barriers, eradication of non-native fish, and dedication of water rights. Minimum in-stream flow levels were established in the MOA that trigger various conservation actions should those predetermined levels be reached. The flow levels will be measured at the Warm Springs West Flume located on the Moapa Valley NWR.

b. Section 7 Consultations Completed for Activities and Projects in the Action Area

1. **File Nos. 1-5-99-F-450 and 84320-2008-F-0078:** On March 3, 2000, the Service issued a programmatic biological opinion (File No. 1-5-99-F-450) to BLM's Ely District Office for implementation of actions in the Caliente Management Framework Plan Amendment (CMFPA). The planning area consisted of public lands in White Pine, Lincoln, and a portion of Nye counties in east-central Nevada. Cumulatively, 25,521 acres of desert tortoise habitat were projected to be affected by the proposed activities within the planning area over a 10-year period.

On September 9, 2008, the Service issued a programmatic biological opinion (File No. 84320-2008-F-0078) to BLM for the Ely District Resource Management Plan (Ely RMP). This programmatic biological opinion superseded the March 3, 2000, programmatic biological opinion for the CMFPA. Programs in the 2008 programmatic biological opinion included: vegetation management; weed management; wild horse management; lands, realty, and renewable energy projects; travel and off-highway vehicle management;

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recreation; livestock grazing management; geological and mineral extraction; and fire management.

Implementation of multiple-use activities (excluding vegetation and weed management) were projected to result in the disturbance of 22,624 acres of desert tortoise critical habitat and 37,311 acres of desert tortoise habitat. During the 10-year term of the programmatic biological opinion, the Service authorized the take of no more than 47 desert tortoises and estimated that 972 tortoises would be taken by non-lethal means (i.e. harassment).

2. **File Nos. 1-5-94-F-334, 335, 336, and 035:** On May 15, 1995, the Service issued a non-jeopardy biological opinion to BLM for the issuance of a right-of-way to install four proposed fiber-optic lines in Clark and Lincoln counties, Nevada. Four applicants comprising the Fiber Toll Joint Venture Project requested a 7.6-m-wide (25-foot-wide) right-of-way for construction of four buried fiber-optic lines. Segments of these lines would parallel SR 168 for approximately 23 miles, and for 43 miles along US 93 (File Nos. 1-5-94-F-334 and 336). Approximately 98 and 65 acres of long- and short-term habitat disturbance, respectively, was attributed to the two segments adjacent to US 93 and SR 168 described above, a majority of which runs through the action area for the CSI project. This included approximately 53 acres of long-term disturbance and 35 acres of short-term disturbance to designated critical habitat (Mormon Mesa CHU) for the desert tortoise. The Service anticipated that up to 34 tortoises would be incidentally taken, 8 through mortality and 26 through injury or harassment.
3. **File No. 1-5-98-F-053, as amended:** On June 18, 1998, the Service issued a programmatic biological opinion to BLM for implementation of the Las Vegas Resource Management Plan (RMP). The project area for this consultation covers all lands managed by BLM's Las Vegas Field Office, including desert tortoise critical habitat, desert tortoise ACECs, and BLM-withdrawn land. The Las Vegas Field Office designated approximately 648 square miles of tortoise habitat as desert tortoise ACEC in the Northeastern Mojave Recovery Unit, and approximately 514 square miles of tortoise habitat as desert tortoise ACEC in the East Mojave Recovery Unit, through the final RMP. As identified in the RMP, BLM manages 743,209 acres of desert tortoise habitat within four tortoise ACECs for desert tortoise recovery. To accomplish desert tortoise recovery in the Northeastern and Eastern Mojave Recovery Units, the Las Vegas Field Office implements appropriate management actions in desert tortoise ACECs.
4. **File No. 1-5-98-FW-177:** On November 2, 1998, the Service issued a non-jeopardy biological opinion to the Nevada Fish and Wildlife Office for the implementation of eradication of non-native fish activities and installation of fish barriers in the Apcar Stream in the Warm Springs Area of the Muddy River. The Service concluded that the project was not likely to jeopardize the continued existence of the Moapa dace.

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Incidental take was authorized and Reasonable and Prudent Measures were identified to minimize take to the species.

5. **File No. 1-5-99-F-411:** On December 8, 1999, the Service issued a non-jeopardy biological opinion to BLM for issuance of a right-of-way permit for the Nevada segment of the Las Vegas to Salt Lake City Long-haul Fiber-Optic Project. This consultation evaluated impacts to the desert tortoise and designated critical habitat from the construction, operation, and maintenance of a buried fiber-optic cable and related structures over an 180-mile linear stretch from the Utah-Nevada border to its terminus north of Nellis Air Force Base in Las Vegas. The section of the fiber-optic cable that runs through the Mormon Mesa CHU and CSI lands was located in NDOT's right-of-way east of US 93. The final area of disturbance was calculated at approximately 270 acres, including 158 acres of permanent impacts. The Service estimated that 4 desert tortoises may be incidentally injured or killed and 200 tortoises could potentially be affected by project activities.
6. **File No. 1-5-01-F-463:** On December 26, 2001, the Service issued a non-jeopardy biological opinion to the Bureau of Indian Affairs for approval of a lease for lands on the Reservation for construction and operation of the Moapa Paiute Energy Center. The proposed project would disturb up to 7 percent of the total available spawning habitat for the Moapa dace. As of the date of this biological opinion, the proposed project has not moved forward and the Service is not aware of any plans in the near future to construct the project.
7. **File No. 1-5-02-FW-463:** On March 13, 2002, the Service issued a non-jeopardy biological opinion to the Desert NWR Complex, Las Vegas, Nevada for the implementation of riparian and aquatic habitat restoration activities in the Pedersen Unit of the Moapa Valley NWR. The Service concluded that the incidental take of less than 10 percent of the 180-200 individuals (18-20 individuals) that may be present in the project area, would not likely jeopardize the continued existence of the Moapa dace. Reasonable and Prudent Measures were identified and implemented to minimize take of the species.
8. **File No. 84320-2008-F-0066 and 1-5-94-F-28R:** On December 20, 2007, the Service issued a biological opinion to BLM-Las Vegas for their proposal to amend an existing right-of-way for construction, operation, and maintenance of a single-circuit, overhead 500 kV transmission line (Southwest Intertie Project). The southern portion of the project begins at the Harry Allen Substation in Clark County, Nevada, crossing through the planning area, and ending approximately 34 miles north of Ely in White Pine County, Nevada. The project would disturb 231 acres of non-critical and 365 acres of critical desert tortoise habitat.

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9. **File No. 1-5-05-FW-536:** On January 30, 2006, the Service issued a non-jeopardy intra-Service programmatic biological opinion for the Proposed Muddy River MOA, regarding the groundwater withdrawal by multiple parties of 16,100 afy from the regional carbonate aquifer in the Coyote Spring Valley and California Wash Basins. Given that there will be groundwater withdrawn from the same regional carbonate aquifer concurrently by different users and at different locations, it was difficult to assign loss to a specific action. The most accurate way to establish incidental take is at the landscape-level, which was analyzed in the Programmatic Biological Opinion. In that parent document, the cumulative withdrawal of 16,100 afy from all parties associated with the MOA predicted a loss of approximately 22 percent riffle and 16 percent pool habitat (as measured at the Warm Springs West gage downstream from the Pedersen Unit) when the flows reach 2.78 cfs. This amount included habitat losses potentially occurring under both the CSI development and SNWA pipeline. Three tiered biological opinions have been issued under this programmatic opinion:

- a. **File No. 1-5-05-FW-536 Tier 1:** On March 2, 2006, the Service issued a non-jeopardy tiered biological opinion to the Corps for the issuance of a Section 404 permit under the Clean Water Act of 1972, as amended, for the CSI residential development project. The Service concluded the proposed residential development is an interdependent activity with the Corps' action and will result in the permanent loss of 6,881 acres of desert tortoise habitat and take of no more than 645 desert tortoises. The proposed action falls within the scope and coverage of the 10(a)(1)(B) permit issued to Clark County for its multiple species habitat conservation plan (MSHCP), and exemption for the anticipated take of the desert tortoise is provided via the incidental take statement for the MSHCP. The Service estimated that the proposed action will result in the incidental take of Moapa dace associated with the loss of 6 percent of riffle habitat and 5 percent of pool habitat, in the Pedersen Unit. Incidental take was authorized, and reasonable and prudent measures were identified to minimize take of the species.
- b. **File No. 1-5-05-FW-536 Tier 2:** On May 9, 2007, the Service issued a non-jeopardy tiered biological opinion to BLM for a right-of-way to the SNWA to construct a water conveyance pipeline. SNWA's appropriated water right of 9,000 afy from Coyote Spring Valley would be pumped in order to participate in the Nevada State Engineer Study (Order 1169), and to provide water to the Moapa Valley area for residential and commercial purposes. The right-of-way would allow construction of approximately 16 miles of 24-inch diameter pipeline to transport water from three existing groundwater pumping wells in the southern end of the Coyote Spring Valley to an existing storage tank and pipeline. The Service estimated that 12 percent of riffle habitat and 9 percent of pool habitat will be lost due to the withdrawal of 9,000 afy associated with the SNWA action; however there were other factors which complicated the establishment of incidental take at this level for the proposed action.

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- c. **File No. 1-5-05-FW-536 Tier 3:** On August 6, 2007, the Service issued a non-jeopardy tiered biological opinion to the U.S. Department of Housing and Urban Development for construction of a water pipeline from an existing well on the Moapa River Indian Reservation to the Moapa Valley of Fire Travel Plaza. The use of 7 of the 16,100 ac for the proposed Travel Plaza will independently have no significant impact on the Muddy River Springs area discharge and subsequently the Moapa dace, but was authorized under the Programmatic Biological Opinion.

On October 22, 2008, the Service issued a non-jeopardy intra-service biological opinion for the Coyote Springs Investment Planned Development Project Multiple-Species Habitat Conservation Plan (MSHCP) (File No. 84320-2008-F-0113). The Service subsequently issued a 40-year incidental take permit to CSI under the authority of section 10(a)(1)(B) of the Act. The Permit covers take of desert tortoise on up to 21,454 acres of private lands in Lincoln County, and management of 13,767 acres of lease lands in Clark and Lincoln counties as the Coyote Springs Investment Conservation Lands. Groundwater withdrawal is not a Covered Activity in the CSI MSHCP. Groundwater withdrawals and their effects to the Moapa dace are subject to evaluation under separate biological opinions for several groundwater development projects, and any appropriate incidental take would be authorized through those biological opinions when issued, or under section 10 (a)(1)(B) if these actions did not involve a Federal agency.

E. Effects of the Proposed Action on the Listed Species/Critical Habitat

Effects of the action refer to the direct and indirect effects of the proposed action on the listed species, together with the effects of other activities that are interrelated and interdependent with that action. Direct effects encompass the immediate, often obvious effect of the proposed action on the listed species or its habitat. Indirect effects are caused by or will result from the proposed action and are later in time, but still reasonably certain to occur. In contrast to direct effects, indirect effects can often be more subtle, and may affect listed species populations and habitat quality over an extended period of time, long after project activities have been completed. Interrelated actions are those that are part of a larger action and depend on the larger action for their justification. Interdependent actions are those that have no independent utility apart from the action under consideration.

1. Effects to the Desert Tortoise (Mojave Population)

Linear construction projects can negatively affect desert tortoise populations. Studies suggest that differences in the extent of the threat are related to the scale of the project, the ability of crews to avoid disturbing burrows, and timing of construction to avoid peak activity periods of tortoises (Boarman 2002). In addition to the discrete disturbance points formed by towers and lines, maintenance roads and repeated operations can (1) introduce continuous sources of disturbance and (2) provide potential sites for invasion of exotic species. Rights-of-way can

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cause habitat destruction and alteration where vegetation is minimal, possibly increasing mortality, directly or indirectly (Boarman 2002).

Direct impacts to the desert tortoise would be the permanent and temporary loss of habitat utilized by tortoises for foraging, breeding, and cover. Approximately 21 acres will be permanently lost by the construction of well houses and well power substations, water storage tanks, access roads, ancillary pipeline facilities, and power poles. Approximately 188 acres will be temporarily lost by the construction of the pipelines, power lines, fiber optic line, temporary access roads, and temporary workspaces such as pipe and power line laydown areas, power line pulling sites, staging areas, and construction easements. Many of these activities will involve blading and excavation of the area. These areas will be rehabilitated as described in the Revegetation Plan in the Plan of Development; however, it will likely take a long time (potentially more than 10 years) before these areas can provide foraging and cover sites for the desert tortoise.

Other areas that have heavy machinery moving over them will have crushed vegetation and compacted soil. LCWD and BLM propose to salvage topsoil during excavation and to reuse the topsoil later as cover on disturbed areas to facilitate re-growth of vegetation. LCWD and BLM will also flag the work areas so that unauthorized habitat removal does not occur.

Any tortoise within the construction area during work activities would be highly vulnerable. Desert tortoises may be killed or injured by project vehicles and equipment in the project area. Construction equipment and vehicles could crush tortoises or collapse burrows both occupied and unoccupied if not located during clearance surveys. Project vehicles and equipment that stray away from designated access roads and areas may crush desert tortoises aboveground or in their burrows. Tortoises may take refuge underneath project vehicles and equipment and be killed or injured when the equipment or vehicle is moved. Blasting during construction could collapse burrows and injure tortoises. Tortoises that wander into the project area could also fall into holes or trenches from which they are unable to escape. The following measures proposed by LCWD and BLM should reduce these potential effects to desert tortoises: 1) conduct tortoise clearance surveys within the project area; 2) enforce a 25 mph speed limit on project access roads; 3) cease project activities that may endanger a tortoise until it is moved out of harm's way by an authorized desert tortoise biologist; 4) present a worker education program; 5) cover construction holes left open overnight and check trenches twice daily to check for entrapment of wildlife; and 6) restrict vehicles and equipment to the work area boundaries and designated access roads.

Tortoises moved during clearance surveys and tortoises that are physically moved out of harm's way to prevent mortality or injury could be inadvertently harmed if not handled properly. Urine and large amounts of urates are frequently voided during handling and may represent a severe water loss, particularly to juveniles (Luckenbach 1982). Overheating can occur if tortoises are not placed in the shade when ambient temperatures equal or exceed temperature maximums for the species (Desert Tortoise Council 1994, revised 1999). Tortoise eggs moved during clearance

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surveys could also be harmed if not handled properly. The following measures proposed by LCWD and BLM should reduce these potential effects to desert tortoises: 1) implementing a worker education program; 2) utilizing Service-approved protocols for handling desert tortoises and tortoise eggs; and 3) ensuring that only authorized individuals handle tortoises.

The resulting indirect impacts to the desert tortoise may include the risk of death, injury, or lower reproductive potential through increased predation and degradation and fragmentation of the habitat surrounding the project area. There is a potential for an increase in the number of predatory and scavenger species due to the presence of humans and improper disposal of trash. Workers associated with the proposed project may provide food in the form of trash and litter; or water, which attracts important tortoise predators such as the common raven, kit fox, and coyote (BLM 1990, Boarman and Berry 1995). Natural predation in undisturbed, healthy ecosystems is generally not an issue of concern. However, predation rates may be altered when natural habitats are disturbed or modified (BLM 1990). Ravens likely would be attracted to human activities and buildings for perch sites and food sources, increasing the potential for predation on juvenile desert tortoise in adjacent habitats. LCWD and BLM will implement a litter-control program and a worker education program to avoid or minimize these potential effects.

The project may degrade habitat in the surrounding landscape by introducing non-native weeds or plants into the project area, which later spread in to the surrounding desert, increasing fuel loads for wildfires and competing with native forbs and shrubs. Land clearing activities in the project area may lead to increased soil erosion especially on steeper slopes. The following measures proposed by LCWD and BLM should help reduce these potential effects to desert tortoise habitat: 1) implementation of a Stormwater and Pollution Prevention Plan; 2) implementation of a Revegetation Plan; and 3) implementation of a Noxious Weed Management Plan.

Following construction, the public may use project access roads which may result in adverse effects to tortoise populations. Humans use the desert for off-road exploration, casual shooting and target practice, personal or commercial collection of animals and plants, searches and digging for minerals and gems, geocaching (GPS guided stash hunts), and even the production of illegal drugs. Desert tortoise shells found in the Mojave Desert with bullet holes were examined forensically with the finding that the tortoises were alive when they were shot (Berry 1986), suggesting that illegal shooting of tortoises could occur. Project personnel could illegally collect tortoises for pets or bring dogs to the project area. Measures proposed by LCWD and BLM to 1) clear project areas of tortoises, 2) prohibit pets from the project area, 3) impose a speed limit, and (4) close unnecessary roads following construction and control public access, should minimize the potential effects to the tortoise described above.

2. Effects to Critical Habitat for the Desert Tortoise (Mojave Population)

Direct impacts to desert tortoise critical habitat would be the permanent and temporary loss of areas that contain the PCEs of desert tortoise critical habitat. Approximately 18 acres will be

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permanently lost by the construction of well houses and well power substations, water storage tanks, access roads, ancillary pipeline facilities, and power poles. Approximately 155 acres will be temporarily lost by the construction of the pipelines, power lines, fiber optic line, temporary access roads, and temporary workspaces such as pipe and power line laydown areas, power line pulling sites, staging areas, and construction easements. Many of these activities that temporarily impact areas will involve blading and excavation of the area which would remove all of the PCEs of critical habitat. These areas will be recontoured and rehabilitated as described in the Revegetation Plan; however, it will likely take a long time before these areas can provide a sufficient quantity and quality of forage species (PCE 2) and sufficient vegetation to provide shelter from temperature extremes and predators (PCE 5). Other areas that have heavy machinery moving over them, will impact PCE 3 (suitable substrates for burrowing, nesting, and overwintering), PCE 4 (burrow, caliche caves, and other shelter sites), and PCE 5. These areas will also likely take a long time to recover and may also need some revegetation or soil de-compaction treatments. LCWD proposes to salvage topsoil during excavation and to reuse the topsoil later as cover on disturbed areas to facilitate re-growth of vegetation. As per the Revegetation Plan only native species will be used and cacti and yucca will be salvaged when possible.

Indirect impacts to the desert tortoise critical habitat may include fragmentation of the habitat surrounding the project area which will degrade PCE 1 (space to support viable populations and to provide for movement, dispersal, and gene flow). Since the project is linear, it has a greater potential to fragment habitat, although it does follow the existing Kane Springs Road. The project is in the LCCRDA corridor which is 0.5 miles wide. This project is the first to use this designated utility corridor so it may have greater impacts than future projects, although the proposed development on CSI lands in Lincoln County will be a greater barrier to tortoise movement.

Indirect impacts also include the introduction or spread of non-native plants in the project area and into the surrounding landscape which may impact PCE 2 and PCE 5. If red brome increases in the project area or surrounding landscape, this could increase the fuel load which increases the chance of large scale fires. Red brome can often out-compete native species because red brome extracts soil water and nutrients more rapidly than similar native annuals (DeFalco *et al.* 2003) and also reduces the growth of mature native perennials (DeFalco *et al.* 2007b). The project could also introduce new non-native plants into the area which could impact PCE 2 and PCE 5 in the future. LCWD and BLM should help reduce these potential effects to critical habitat by the implementation of a Noxious Weed Management Plan and the implementation of a Fire Management Plan. The Noxious Weed Management Plan includes the following measures: survey of area prior to land clearing, cleaning of vehicles and equipments, treating weed infestations, post-construction monitoring and employee education.

Project activities could also increase soil erosion. Increased soil erosion could negatively impact PCE 2, PCE 4, and PCE 5. LCWD and BLM should help reduce these potential effects to critical habitat by the implementation of a Stormwater and Pollution Prevention Plan.

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3. Effects to the Moapa Dace

The Moapa dace will not be directly affected by the physical construction of the proposed groundwater wells, pipelines, and power facilities; however, groundwater pumping will likely indirectly affect the headwater spring discharges of the Muddy River, and therefore, the Moapa dace. The magnitude and timing of impacts from pumping in Kane Springs Valley are uncertain. Differences in boundary conditions relating to the areal extent of the aquifer, location of the pumping, transmissivity, and permeability, all influence the magnitude and timing of pumping impacts. Also, if the proposed pumping lowers carbonate water levels in the Warm Springs Area further, not all springs will be affected equally. The decrease in spring discharge will be proportional to the decrease in head elevation at each spring. Higher elevation springs have a lower head difference initially and are therefore more susceptible to decreases in groundwater levels. Therefore, the higher elevation springs will be affected proportionately more for a given decline in groundwater levels. The highest elevation springs occur on the Pedersen Unit of the Moapa Valley NWR, an area which also comprises some of the most important spawning habitat for Moapa dace in the system.

As discussed in the programmatic biological opinion for the Muddy River MOA (Service 2006c), existing data suggests that current groundwater pumping of the Arrow Canyon Well is causing a decline in the regional carbonate aquifer levels locally and in the Coyote Spring Valley, and a decrease in spring discharge in the Warm Springs Area (Mayer 2004). The average pumping rate at the Arrow Canyon Well since 1998 has been 3.3 cfs or 2,400 afy. Pumping rates will increase with commencement of the pump test, and may further increase pending the outcome of the pump test and associated monitoring. The proposed action includes pumping of an additional 1,000 afy from the same regional carbonate aquifer. The pumping will be located along the same flow path that supplies the Warm Springs Area and is within the low-gradient, high-transmissivity zone that connects Kane Springs Valley, Coyote Spring Valley and the Warm Springs Area.

Under the terms of the stipulated agreement, if the Average Flow Level reaches 3.15 cfs or less but greater than 3.0 cfs at the Warm Springs West gage, LWCD and VWC agree to reduce pumping from all wells in Kane Springs Valley by 50 percent. This would mean pumping at these flow levels would be reduced to 500 afy. If the Average Flow Level reaches 3.0 cfs or less, LWCD and VWC agree to cease pumping from all wells in Kane Springs Valley until the Average Flow Level exceeds 3.0 cfs. The exact magnitude and timing of the impacts from pumping groundwater from the carbonate aquifer in Kane Springs Valley are unknown at this time, as are the effects of reduced or cessation of groundwater pumping or whether there will be some equilibration of the aquifer to the proposed pumping.

In the programmatic biological opinion for the MOA, the Service (2006c) used the potential effects on spring discharge at the Warm Springs West gage to predict potential effects to Moapa dace habitat. The results indicated that both spring discharge and dace habitat are reduced with declines in groundwater levels. Flows and habitat loss were projected as a function of

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incremental declines in groundwater levels (Service 2006c). If flows were reduced to 3.02 cfs at the Warm Springs West gage this would be a 25 percent reduction of flows from the 1998 conditions which would reduce riffle habitat by 17 percent and pool habitat by 13 percent in the Petersen Unit. Because pumping for the Kane Springs project will occur concurrently with the potential pumping of 16,100 afy in the carbonate aquifer of White River Flow System, only a very small amount of this possible reduction would be attributable to pumping in Kane Springs Valley. Given the amount of 1,000 afy authorized by the State Engineer, effects from this project will be difficult to tease apart from effects of pumping 16,100 afy as described in the programmatic biological opinion for the MOA. However, monitoring of the Kane Springs wells concurrent with other monitoring under the MOA will lend greater understanding to the overall effects.

The primary effect to the Moapa dace of diminished flows within the spring channels will be a decrease in the hydraulic conditions that create the diversity of habitat. A decrease in velocity and depth within riffles would result in a decrease of invertebrate and phytoplankton (food) production. Drift stations in pools are maintained by the scouring effect of turbulent flow. Scour will decrease in pools as water velocity and depth at the upstream end of the pool decreases. Perhaps the most prominent impact that would occur, as a result of decreased discharge and subsequent depth, is the reduction of overall volume of water that will be available to the species within the channel. Scopettone *et al.* (1992) demonstrated that Moapa dace size is scaled to water volume. Thus, larger water volumes provide the habitat necessary for increased food production and subsequently larger fish, therefore greater fecundity. Hence, more numerous, larger eggs provide a better opportunity for the long-term survival of the species.

Additional factors that would influence channel and hydraulic characteristics within the stream channels following a decline in spring discharge include, but are not limited to, changes in sediment transportation rates, and the alteration of riffle and pool maintenance that is accomplished at the present rate of discharge in each spring channel. Additionally, vegetative encroachment and subsequent channel obstruction may also occur as the wetted cross sectional area of the channel decreases, and new surfaces become exposed for vegetation growth. Decreases in these parameters will likely have an adverse impact on the overall diversity and quantity of hydraulic habitat.

The Pedersen Unit of the Moapa Valley NWR is one of the six spring complexes that the Moapa dace depends on for successful reproduction. It includes the highest elevation spring, presumed most susceptible to groundwater level declines. The analysis presented in the programmatic biological opinion for the MOA (Service 2006c) estimated that at 3.02 cfs, there is a 25 percent loss in flow on the Pedersen Unit from 1998 conditions. This loss is estimated to reduce available riffle habitat by 17 percent and pool habitat by 13 percent within the Pedersen Unit. In addition to the loss of habitat, decreased flows would also result in a loss of temperature that would extend downstream, thereby reducing the thermal load in the system and thus the amount of available habitat at the appropriate spawning temperature. The additional 1,000 afy of groundwater pumping under the Kane Springs Groundwater Development Project would

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potentially increase overall habitat loss and temperature declines, however, trigger levels identified in the Monitoring, Management and Mitigation Plan (starting at 3.2 cfs or less) are a higher threshold than those established under the MOA. Accordingly, adverse effects on Moapa dace habitat should be prevented.

Conservation Measures Identified to Minimize Effects of the Proposed Action

Guaranteed Groundwater Pumping Reductions (Trigger ranges): LCWD and VWC have agreed to reduce groundwater pumping by half in the Kane Springs Valley should stream flows reach 3.15 cfs or less but greater than 3.0 cfs at the Warm Springs West gage. The groundwater pumping will be stopped in the Kane Springs Valley should stream flows reach 3.0 cfs or less at the Warm Springs West gage. This conservation measure will result in a reduction in the rate of decline of water levels and spring discharge. Further reduction in the rate of decline will depend on the effect of remaining groundwater pumping by other parties in the Coyote Spring Valley, California Wash, and the Warm Springs Area.

Restore Moapa Dace Habitat Outside of the Moapa Valley NWR Boundary: LCWD and VWC agreed to provide funds annually for five years to be used for habitat restoration outside of the Moapa Valley NWR boundary to promote recovery of the Moapa dace. This funding will be applied towards various on-going or proposed activities that would improve and secure habitat that is currently not being utilized due to degraded conditions (i.e. illegal diversions or non-native species presence). The funding will provide a mechanism to restore habitat to a level that would provide a higher quality of habitat for the species. These habitat improvements would contribute to the long-term survival of the species by increasing the food production potential, providing additional habitat types that would be available for the various life stages and providing an environment that is devoid of predatory non-native fishes.

F. Cumulative Effects

Cumulative effects are those effects of future non-Federal (State, local government, or private) activities that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act.

1. Desert Tortoise (Mojave Population)

The action area is on both Federal and private lands. The Service determined that future actions in the action area would likely require section 7 consultation or fall under purview of an HCP (section 10 of the Act). Thus, no future non-Federal activities are reasonably certain to occur in the action area; thus, there are no cumulative effects to the desert tortoise as a result of the proposed action. Private lands in the action area include CSI property. These activities are proposed to be covered under the Coyote Springs Investment MSHCP and associated incidental take permit, which are currently under development.

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The Mormon Mesa Critical Habitat unit occurs mostly on Federal lands with CSI private land along US 93 and private property along Meadow Valley Wash. The Service determined that future actions in the action area would likely require section 7 consultation or fall under purview of an HCP (section 10 of the Act). No future non-Federal activities are reasonably certain to occur in the action area; thus, there are no cumulative effects to designated critical habitat as a result of the proposed action. Activities on CSI lands in Clark County are covered under the approved Clark County MSHCP and associated incidental take permit, and the activities in Lincoln County are proposed to be covered under the CSI MSHCP and associated incidental take permit, which are currently under development. The Southeastern Lincoln County Habitat Conservation Plan and associated incidental take permit, which are currently under development, will cover activities on private land along Meadow Valley Wash.

3. Moapa Dace

Future demand for groundwater will continue to threaten spring flows and surface water important for aquatic species such as the Moapa dace. In the Warm Springs Area, MVWD's existing permit would allow more groundwater to be pumped from the Arrow Canyon Well in the future. The maximum permitted pumping rate at the Arrow Canyon Well is 7,200 afy, as compared with the annual average of 2,400 afy pumped currently. Depending on the outcome of the pump study mandated in the State Engineer Order 1169 and subsequent ruling by the State Engineer, additional groundwater could potentially be pumped in Coyote Spring Valley. The maximum volume that could be removed from the Coyote Spring Valley and Muddy River Springs Area basins under existing permits is 31,100 afy. This represents more than a tenfold increase from current withdrawals in the system. In addition to the existing permitted water rights, there are pending applications for a far greater volume of groundwater above and beyond the permitted amount in the Coyote Spring Valley, Muddy River Springs Area, and Kane Springs Valley hydrographic basins.

G. Conclusion**1. Desert Tortoise (Mojave Population)**

After reviewing the current status of the desert tortoise, the environmental baseline for the action area, the effects of the proposed project, and the cumulative effects, it is the Service's biological opinion that the project, as proposed and analyzed, is not likely to jeopardize the continued existence of the threatened desert tortoise (Mojave population). This conclusion for the desert tortoise is based on the following:

- a. The proposed project will not result in a level of take of desert tortoise that would significantly affect the rangewide number, distribution, or reproduction of the species; tortoises that are taken as a result of the project are anticipated to remain in the wild with

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no long-term effects except for two desert tortoise estimated to be killed or injured by project activities.

- b. The desert tortoise densities in the project area are considered low and measures have been proposed by LCWD and BLM to minimize the effects of the proposed action on the desert tortoise.

2. Critical Habitat for Desert Tortoise (Mojave Population)

The Service has reviewed the current rangewide status of designated critical habitat for the desert tortoise (Mojave population), the environmental baseline, the effects of the project, and the cumulative effects. Based on this review, it is the Service's biological opinion that these actions are not likely to destroy or adversely modify designated critical habitat for the desert tortoise (Mojave population). The project actions will not diminish the capability of the area to serve its role for recovery by continuing to provide the PCEs of critical habitat. The basis for this conclusion is summarized as follows:

- a. The amount of critical habitat permanently and temporarily disturbed by the project is 173 acres, approximately 0.05 percent of the Mormon Mesa CHU.
- b. Measures have been proposed by LCWD and BLM to minimize the effects of the proposed action on critical habitat for the desert tortoise.

3. Moapa Dace

After reviewing the current status of and environmental baseline for the Moapa dace, the effects of the project, and the cumulative effects, it is the Service's biological opinion that the action, as proposed and analyzed, is not likely to jeopardize the continued existence of the endangered Moapa dace. The project could contribute to groundwater level declines and spring flow reductions; however, implementation of the project's conservation actions will minimize these impacts.

INCIDENTAL TAKE STATEMENT

Section 9 of the Act, as amended, prohibits take (harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct) of listed species of fish or wildlife without a special exemption. "Harm" is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering (50 CFR § 17.3). "Harass" is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering (50 CFR § 17.3). Incidental take is any take of listed animal species that results from, but is not the purpose of, carrying out an otherwise lawful activity conducted by the

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Federal agency or applicant. Under the terms of sections 7(b)(4) and 7(o)(2) of the Act, taking that is incidental to and not intended as part of the agency action is not considered a prohibited taking provided that such taking is in compliance with the terms and conditions of this incidental take statement.

The terms and conditions may include: (1) restating measures proposed by BLM; (2) modifying the measures proposed by BLM; or (3) specifying additional measures considered necessary by the Service. Where these terms and conditions vary from or contradict the minimization measures proposed under the Description of the Proposed Action, specifications in these terms and conditions shall apply. The measures described below are nondiscretionary and must be implemented by BLM so that they become binding conditions of any project, contract, grant, or permit issued by BLM or other jurisdictional Federal agencies as appropriate, in order for the exemption in section 7(o)(2) to apply. The Service's evaluation of the effects of the proposed actions includes consideration of the measures developed by BLM, and repeated in the section entitled "Description of the Proposed Action" of this biological opinion, to minimize the adverse effects of the proposed action on the desert tortoise. Any subsequent changes in the minimization measures proposed by BLM may constitute a modification of the proposed action and may warrant reinitiation of formal consultation, as specified at 50 CFR § 402.16. These reasonable and prudent measures are intended to clarify or supplement the protective measures that were proposed by BLM as part of the proposed action.

BLM, or other jurisdictional Federal agencies as appropriate, have a continuing duty to regulate the activity that is covered by this incidental take statement. If BLM, or other jurisdictional Federal agencies as appropriate, fail to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to permits or grant documents, and/or fails to retain oversight to ensure compliance with these terms and conditions, the protective coverage of section 7(o)(2) may lapse.

A. Amount of Take

Desert Tortoise (Mojave Population)

Based on the analysis of effects provided above, measures proposed by BLM, and anticipated project duration the Service anticipates that the following take could occur as a result of the proposed action:

1. No more than two adults and an unknown number of hatchling and juvenile desert tortoises would be incidentally killed or injured as a result of the proposed project. Should any desert tortoise be killed or injured in association with the proposed action, all activity in the vicinity of the incident shall cease and the project proponent shall contact the Service within 24 hours to assess the circumstances and discuss if additional protective measures are necessary.

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2. All desert tortoises located during clearance surveys or located in harm's way in work areas may be harassed by capture and removal from the project area. Based on survey data, timing of the proposed project, and description of the project area, the Service estimates that no more than 33 desert tortoises may be taken (other than killed or injured) by non-lethal means as a result of project activities.
3. An unknown number of desert tortoise nests with eggs may be excavated and relocated. The Service determined that no desert tortoise nests with eggs are anticipated to be destroyed as a result of project activities.
4. An unknown number of desert tortoises may be preyed upon by ravens or other subsidized desert tortoise predators drawn to trash in the project area; however, the Service estimates that the potential increase in ravens will be minimized by litter-control measures proposed by BLM.

Moapa Dace

The Service anticipates that incidental take of Moapa dace through harm (i.e., habitat modification or degradation that results in death or injury) will occur, but the actual death or injury of fish will be difficult to detect for the following reasons: the species has a small body size and finding a dead or impaired specimen is unlikely in a flowing stream environment. On the other hand, significant habitat modification or degradation that could result in take of Moapa dace will be detectable and measurable. Therefore, we are expressing take of Moapa dace in terms of habitat loss resulting from changes in habitat characteristics, such as water temperature or chemistry and water flows. Although the extent of effects to the species as a result of the proposed action is not yet known, future and on-going biological and hydrological studies will assist us in determining how flow reductions and thermal load losses will affect Moapa dace habitat, food availability, reproduction, and fecundity.

Perhaps the most significant impact to Moapa dace habitat that could result from implementation of the proposed action, as a result of decreased discharge and subsequent wetted area, is the reduction of overall volume of water that would be available to the species within the channel. The amount of groundwater pumping permitted under the Kane Springs Groundwater Development Project (1,000 afy) is substantially smaller than the amount of pumping that could potentially co-occur under Order 1169 (16,100 afy). A small but unquantifiable amount of take in the form of habitat loss would occur in the Pedersen Unit if flows reached 3.0 cfs at the Warm Spring West gage. Should flows at the Warm Springs West gage decline below 3.0 cfs, the amount of incidental take for this project would be exceeded for the Moapa dace.

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In the accompanying biological opinion, the Service determined that this level of anticipated take is not likely to result in jeopardy to the desert tortoise or Moapa dace. These determinations are based in part on the implementation of conservation measures detailed in the BA for this project.

C. Reasonable and Prudent Measures with Terms and Conditions

The Service believes that the following reasonable and prudent measures (RMPs) are necessary and appropriate to minimize take of desert tortoise or Moapa dace.

RPM 1: *BLM, LCWD, VWC, and other jurisdictional Federal agencies as appropriate, shall ensure implementation of measures to minimize injury or mortality of desert tortoises due to surface-disturbing activities and operation of project vehicles or equipment:*

Terms and Conditions:

- 1.a. An authorized desert tortoise biologist shall be onsite at all locations where ground-disturbing activities are occurring within desert tortoise habitat. The authorized biologist will be responsible for approving, evaluating, and supervising monitors to assist in implementing the desert tortoise measures of this biological opinion. Potential biologists shall complete the Qualifications Form (Attachment A) and submit it to the Service for review and approval as appropriate. Allow 30 days for Service review and response.
- 1.b. Prior to initiation of construction, an authorized biologist or approved monitor shall present a desert tortoise awareness program to all personnel who will be onsite, including but not limited to contractors, contractors' employees, supervisors, inspectors, and subcontractors. This program will contain information concerning the biology and distribution of the desert tortoise and other sensitive species, their legal status and occurrence in the project area; the definition of "take" and associated penalties; the terms and conditions of this biological opinion; the means by which employees can help facilitate this process; responsibilities of workers, approved monitors, and biologists; and reporting procedures to be implemented in case of desert tortoise encounters or non-compliance with this biological opinion. The name of every individual trained will be recorded on a sign-in sheet. Each trained individual will be given evidence indicating they have received this training and will keep that evidence with them at all times when they are in the project area.
- 1.c. Immediately prior to surface-disturbing activities or traveling off of main access roads on the right-of-way, the authorized biologist shall survey for desert tortoises

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and their burrows using techniques providing 100-percent coverage of the right-of-way and an additional area approximately 90 feet from both sides of the right-of-way. Transects will be no greater than 30 feet apart. All potential desert tortoise burrows will be examined to determine occupancy of each burrow by desert tortoises and handled in accordance with Term and Condition 1.d. – 1.f and 2.a – 2.c. below.

m.

- 1.d. All potential desert tortoise burrows located within the project area that are at risk for damage shall be excavated by hand by an authorized biologist, tortoises removed, and burrows collapsed or blocked to prevent occupation by desert tortoises.
- 1.e. Desert tortoises located in the project area, but outside of an area to be disturbed by ground disturbing activities, sheltering in a burrow during a period of reduced activity (*e.g.*, winter), may be temporarily penned. Tortoises shall not be penned in areas of moderate or heavy public use. Penning shall be accomplished by installing a circular fence, approximately 20 feet in diameter to enclose the tortoise/burrow. The pen should be constructed with durable materials (*i.e.*, 16 gauge or heavier) suitable to resist desert environments. Fence material should consist of ½-inch hardware cloth or 1-inch horizontal by 2-inch vertical, galvanized welded wire. Pen material should be 24 inches in width. Steel T-posts or rebar (3 to 4 feet) should be placed every 5 to 6 feet to support the pen material. The pen material should extend 18 to 24 inches aboveground. The bottom of the enclosure will be buried several inches; soil mounded along the base; and other measures should be taken to ensure zero ground clearance. Care shall be taken to minimize visibility of the pen by the public. An authorized biologist, approved monitor, or designated worker shall check the pen daily.
- 1.f. Desert tortoises and eggs found within construction sites shall be removed by an authorized biologist in accordance with the most current protocols identified by BLM and the Service. Desert tortoises will be moved solely for the purpose of moving them out of harm's way. Desert tortoises shall be relocated up to 1,500 feet into adjacent undisturbed habitat on protected public land in accordance with Service-approved handling protocol (Desert Tortoise Council 1994, revised 1999). The disposition of all tortoises handled shall be documented in accordance with 6.b. below.
- 1.g. All fuel, transmission or brake fluid leaks, or other hazardous materials shall not be drained onto the ground or into streams or drainage areas. All petroleum products and other potentially hazardous materials shall be removed to a disposal facility authorized to accept such materials. Waste leaks, spills or releases shall be reported immediately to BLM. BLM or the project proponent shall be responsible for spill material removal and disposal to an approved off-site landfill.

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Servicing of construction equipment will take place only at a designated area. All fuel or hazardous waste leaks, spills, or releases will be stopped or repaired immediately and cleaned up at the time of occurrence. Service and maintenance vehicles will carry a bucket and pads to absorb leaks or spills.

- 1.h. Vehicles shall not exceed 25 mph on access roads. Authorized desert tortoise biologists and/or approved monitors will ensure compliance with speed limits during construction.
- 1.i. Project personnel shall exercise caution when commuting to the project area and obey speed limits to minimize any chance for the inadvertent injury or mortality of species encountered on roads leading to and from the project site. All desert tortoise observations, including mortalities, shall be reported directly to an authorized biologist and the Service.
- 1.j. Any vehicle or equipment on the right-of-way within desert tortoise habitat shall be checked underneath for tortoises before moving. This includes all construction equipment and the area under vehicles should be checked any time a vehicle is left unattended, as well as in the morning before any construction activity begins. If a desert tortoise is observed, an authorized biologist will be contacted.
- 1.k. Project activity areas shall be clearly marked or flagged at the outer boundaries before the onset of construction. All activities shall be confined to designated areas. The authorized biologist and approved monitors shall ensure that no habitat is disturbed outside designated areas as a result of the project, including ensuring that all vehicles and equipment remain on the right-of-way or areas devoid of native vegetation.
- 1.l. To prevent mortality, injury, and harassment of desert tortoises and damage to their burrows and coversites, no pets shall be permitted in any project construction area.
- 1.m. All desert tortoises observed within the project area or access road shall be reported immediately to the authorized biologist. The authorized biologist shall halt activities as necessary to avoid harm to a desert tortoise. Project activities that may endanger a desert tortoise shall cease until the desert tortoise moves out of harm's way or is moved out of harm's way by an authorized biologist.
- 1.n. Only water or an alternative substance approved by BLM shall be used as a dust suppressant. Water application shall avoid pooling of water on roadways. Pools of water may act as an attractant to desert tortoises.

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- 1.o. In the event that blasting is required, a 200-foot-radius area around the blasting site shall be surveyed by an authorized biologist for desert tortoises prior to blasting, using 100-percent-coverage survey techniques. All tortoises located above ground or in pallets within this 200-foot radius of the blasting site shall be moved 500 feet from the blasting site. Additionally, tortoises in burrows within 75 feet of the blasting will be placed into an artificial or unoccupied burrow 500 feet from the blasting site. This will prevent tortoises that leave their burrow upon translocation from returning to the blasting site. Tortoises in burrows at a distance of 75 to 200 feet from the blasting site will be left in their burrows. Burrow locations will be flagged and recorded using a GPS unit and burrows would be stuffed with newspapers. Immediately after blasting, newspaper and flagging will be removed. Blasting would only occur in the brief time period after an area has been cleared by an authorized biologist, but before any relocated tortoises could return to the site.
- 1.p. If possible, overnight parking and storage of equipment and materials shall be located in previously-disturbed areas or areas to be disturbed that have been cleared by an authorized tortoise biologist. If not possible, areas for overnight parking and storage of equipment shall be designated by the authorized biologist.
- 1.q. Within desert tortoise habitat, any construction pipe, culvert, or similar structure with a diameter greater than 3 inches stored less than 8 inches above ground on the construction site for one or more nights shall be inspected for tortoises before the material is moved, buried, or capped. As an alternative, all such structures may be capped before being stored on the construction site.
- 1.r. Flagging and wire shall be removed from the project area at the end of project to ensure debris is not consumed by desert tortoises.
- 1.s. All project activities in desert tortoise habitat shall be conducted from dawn until dusk.
- 1.t. Any excavated holes left open overnight shall be covered, and/or tortoise-proof fencing (Attachment B) shall be installed to prevent the possibility of tortoises falling into the open holes.
- 1.u. Open pipeline trenches shall be fenced with temporary tortoise-proof fencing or inspected by an authorized biologist or approved monitor periodically throughout and at the end of the day, and immediately prior to backfilling, and tortoise escape ramps (of at least 3:1 slope) shall be installed at least every quarter mile. Any tortoise that is found in a trench or excavation shall be promptly removed by an authorized biologist in accordance with Service-approved protocol or alternative

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method approved by the Service if the biologist is not allowed to enter the trench for safety reasons.

- 1.v. In areas to be encircled by a security fence, such as well yards and well substations, the fence shall be installed at least one foot below the surface of the ground or install permanent desert tortoise fencing around the area, to ensure that tortoises do not get trapped inside. See Attachment B for the Service's recommendations on tortoise exclusion fencing, dated September 2005. Fences should be checked during regular maintenance of the facilities to ensure zero ground clearance.
- 1.w. Any tortoise injured as a result of the proposed project shall immediately be transported to a qualified veterinarian and reported to the Service's Nevada Fish and Wildlife Office in Las Vegas at (702) 515-5230.

RPM 2: *BLM, LCWD, and other jurisdictional Federal agencies as appropriate, shall ensure implementation of the following measures to ensure that tortoises are not injured as a result of capture and handling:*

Terms and Conditions:

- 2.a. All appropriate NDOW permits or letters of authorization shall be acquired prior to handling desert tortoises and their parts, and prior to initiation of any activity that may require handling tortoises.
- 2.b. Tortoises and nests shall be handled and relocated by an authorized tortoise biologist in accordance with the Service-approved protocol (Desert Tortoise Council 1994, revised 1999). If the Service or Desert Tortoise Council releases a revised protocol for handling of desert tortoises before initiation of project activities, the revised protocol shall be implemented for the project area. A pair of new, disposable latex gloves shall be used for each tortoise that must be handled. After use, the gloves will be properly disposed. Burrows containing tortoises or nests shall be excavated by hand, with hand tools, to allow removal of the tortoise or eggs. Desert tortoises moved during the tortoises less active season or those in hibernation, regardless of date, must be placed into an adequate burrow; if one is not available, one shall be constructed in accordance with Desert Tortoise Council (1994, revised 1999) criteria. Desert tortoises that are located aboveground and need to be moved from the project area shall be placed in the shade of a shrub. All desert tortoises removed from burrows shall be placed in an unoccupied burrow of approximately the same size and orientation as the one from which it was removed.

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- 2.c. Special precautions shall be taken to ensure that desert tortoises are not harmed as a result of their capture and movement during extreme temperatures (i.e., air temperatures below 55° F or above 95° F). Under such adverse conditions, tortoises captured will be monitored continually by an authorized biologist or approved monitor until the tortoise exhibits normal behavior. If a desert tortoise shows signs of heat stress, procedures will be implemented as identified in the Service-approved protocol (Desert Tortoise Council 1994, revised 1999). The disposition of all tortoises handled shall be documented in accordance with 6.b. below.

RPM 3: *BLM, LCWD, and other jurisdictional Federal agencies as appropriate, shall ensure implementation of the following measures to minimize predation on desert tortoises by predators drawn to the project area:*

Terms and Conditions:

Trash and food items shall be disposed properly in predator-proof containers with resealing lids. During construction activities, trash containers will be emptied and waste will be removed from the project area daily. Trash removal reduces the attractiveness of the area to opportunistic predators such as desert kit fox, coyotes, and common ravens.

RPM 4: *BLM, LCWD, and other jurisdictional Federal agencies as appropriate, shall ensure implementation of the following measures to minimize loss and long-term degradation and fragmentation of desert tortoise habitat, such as soil compaction, erosion, crushed vegetation, and introduction of weeds or contaminants as a result of construction activities:*

Terms and Conditions:

- 4.a Off-road travel outside construction zones shall be prohibited.
- 4.b. The designated utilities shall follow the Noxious Weed Management Plan which includes the following: washing vehicles and equipment prior to mobilizing to the project area, providing onsite personnel with BLM weed identification information, reseeding the project area with a BLM-approved certified weed-free seed mix, and controlling noxious weeds should they be introduced as a result of the proposed action.
- 4.c. After completion of the project, the designated utilities shall follow the Revegetation Plan to restore all temporarily-disturbed areas to functioning desert tortoise habitat, using native seeds or plants.

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- 4.d. BLM shall ensure payment of remuneration fees by the project proponents, the designated utilities, for compensation of the loss of desert tortoise habitat as a result of the proposed project. BLM shall require a receipt of payment from each designated utility prior to issuing the Notice to Proceed.

The right-of-way applicant is required to submit a Final Plan of Development to the BLM, which must be approved by BLM prior to issuance of the Notice to Proceed. It is likely that the amount of disturbance will change with the final engineering design; therefore, BLM will reevaluate the project disturbance and adjust the total compensation fee accordingly. A copy of the Final Plan of Development and a breakdown of the final compensation fee will be provided to the Service. The applicant will be made aware that, depending on final engineering designs, the final compensation fee may be lower than the estimated value provided in this document.

Currently, the basic compensation rate for disturbance to desert tortoise habitat is \$753 per acre. For disturbance to desert tortoise critical habitat a multiplier is used to increase the cost per acre as described in Hastey *et al.* (1991). For each project, this multiplier for critical habitat is based on assignment of ratings to the following five factors:

- Category of Habitat (value of the land to tortoise populations)
- Term of Effect (short term vs. long term)
- Existing Disturbance on Site
- Growth Inducement (growth inducing effects of the proposed action)
- Effect of Adjacent Lands (whether adjacent lands will be affected)

The proposed project will disturb 209 acres of desert tortoise habitat on lands in Lincoln County. The total compensation fee for this project is \$808,722.

Attachment C shows a breakdown of these calculations. Fees for disturbances on Federal land will be deposited into the Lincoln County Section 7 Account, while fees for disturbance on private land will be deposited into the CSI MSHCP Section 10 Trust Fund. The payee will fill out the attached fee payment forms (Attachment D) and include these with the payments.

Each year these fees will be indexed for inflation based on the Bureau of Labor Statistics Consumer Price Index for All Urban Consumers (CPI-U). Information on the CPI-U can be found on the internet at:

<http://stats.bls.gov/news.release/cpi.nr0.htm>. The next rate adjustment will occur on March 1, 2009.

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Fees deposited in the Lincoln County Section 7 account will be managed consist with an MOA to be developed between BLM and the Service. The development of a MOA will be initiated within 30 days of the ROD.

Section 7 fees collected under this biological opinion may be used in coordination with the mitigation program of the CSI MSHCP, to implement conservation and recovery measures within the Mormon Mesa critical habitat unit.

RPM 5: *BLM, LCWD, VWC, and other jurisdictional Federal agencies as appropriate, shall ensure implementation of the following measures to minimize impacts to Moapa dace that may result from groundwater pumping associated with the project in the Kane Springs Valley:*

Terms and Conditions:

BLM shall assure that all provisions of the proposed actions including the Monitoring, Management and Mitigation Plan of the Stipulated Agreement are fully implemented.

RPM 6: *BLM, LCWD, and other jurisdictional Federal agencies as appropriate, shall ensure implementation of the following measures to comply with the reasonable and prudent measures, terms and conditions, reporting requirements, and reinitiation requirements contained in this biological opinion:*

Terms and Conditions:

6.a. LCWD shall designate a field contact representative. The field representative will be responsible for overseeing compliance with protective stipulations for the desert tortoise and coordinating directly with BLM and the Service. The field contact representative shall have the authority to halt activities or construction equipment that may be in violation of the stipulations. A copy of the terms and conditions of this biological opinion shall be provided to the field contact representative, biologists, and monitors for the project.

6.b. The authorized biologist shall record each observation of desert tortoise handled. Information will include the following: location, date and time of observation; whether tortoise was handled, general health and whether it voided its bladder; location tortoise was moved from and location moved to; and unique physical characteristics of each tortoise. A final report will be submitted to the Service's Nevada Fish and Wildlife Office in Las Vegas within 90 days of completion of the project.